Welcome to STN International! Enter x:x

LOGINID: SSPTANXR1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
* * * * * * * * * *
                     Welcome to STN International
                  Web Page for STN Seminar Schedule - N. America
NEWS
NEWS
         OCT 02
                 CA/CAplus enhanced with pre-1907 records from Chemisches
                  Zentralblatt
         OCT 19
NEWS
                 BEILSTEIN updated with new compounds
NEWS
         NOV 15
                 Derwent Indian patent publication number format enhanced
         NOV 19
NEWS 5
                 WPIX enhanced with XML display format
NEWS 6
         NOV 30
                 ICSD reloaded with enhancements
NEWS 7 DEC 04 LINPADOCDB now available on STN
NEWS 8 DEC 14 BEILSTEIN pricing structure to change
NEWS 9 DEC 17 USPATOLD added to additional database clusters
NEWS 10 DEC 17 IMSDRUGCONF removed from database clusters and STN
NEWS 11 DEC 17
                 DGENE now includes more than 10 million sequences
NEWS 12 DEC 17
                 TOXCENTER enhanced with 2008 MeSH vocabulary in
                 MEDLINE segment
NEWS 13 DEC 17 MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 14 DEC 17 CA/CAplus enhanced with new custom IPC display formats
NEWS 15 DEC 17
                 STN Viewer enhanced with full-text patent content
                  from USPATOLD
NEWS 16
         JAN 02
                  STN pricing information for 2008 now available
NEWS 17
         JAN 16
                 CAS patent coverage enhanced to include exemplified
                  prophetic substances
NEWS 18
         JAN 28
                 USPATFULL, USPAT2, and USPATOLD enhanced with new
                  custom IPC display formats
NEWS 19
         JAN 28
                 MARPAT searching enhanced
NEWS 20 JAN 28 USGENE now provides USPTO sequence data within 3 days
                  of publication
NEWS 21 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 22 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements
NEWS 23 FEB 08 STN Express, Version 8.3, now available
NEWS 24 FEB 20 PCI now available as a replacement to DPCI
NEWS 25 FEB 25 IFIREF reloaded with enhancements
NEWS 26 FEB 25
                 IMSPRODUCT reloaded with enhancements
NEWS 27 FEB 29
                 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                  U.S. National Patent Classification
NEWS 28
         MAR 31
                  IFICDB, IFIPAT, and IFIUDB enhanced with new custom
                  IPC display formats
NEWS 29
         MAR 31
                 CAS REGISTRY enhanced with additional experimental
                  spectra
NEWS 30
         MAR 31
                  CA/CAplus and CASREACT patent number format for U.S.
                  applications updated
NEWS 31
         MAR 31
                 LPCI now available as a replacement to LDPCI
NEWS 32
         MAR 31
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
```

AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 14:05:40 ON 01 APR 2008

=> file reg
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FILE 'REGISTRY' ENTERED AT 14:05:52 ON 01 APR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by ${\tt InfoChem.}$

STRUCTURE FILE UPDATES: 31 MAR 2008 HIGHEST RN 1011196-35-2 DICTIONARY FILE UPDATES: 31 MAR 2008 HIGHEST RN 1011196-35-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

COPYRIGHT (C) 2008 American Chemical Society (ACS)

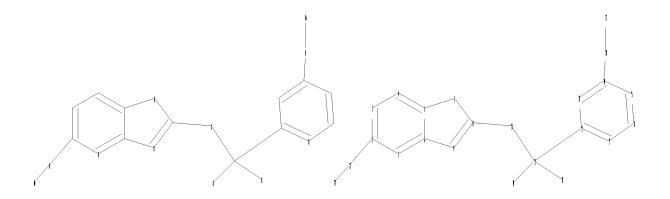
Please note that search-term pricing does apply when conducting ${\tt SmartSELECT}$ searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\10561844b.str



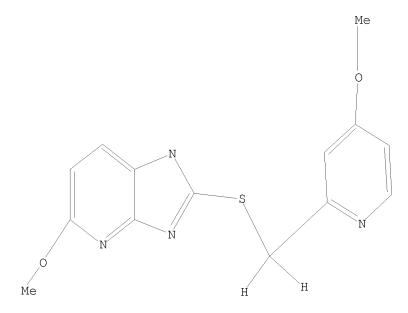
```
chain nodes :
10 11 18 19 20 21 23 24
ring nodes :
1 2 3 4 5 6 7 8 9 12 13 14 15 16 17
chain bonds :
2-23 8-10 10-11 11-12 11-18 11-19 14-20 20-21 23-24
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 12-13 12-17 13-14 14-15 15-16
16-17
exact/norm bonds :
2-23 5-7 6-9 7-8 8-9 8-10 10-11 14-20
exact bonds :
11-12 11-18 11-19 20-21 23-24
normalized bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 12-13 \quad 12-17 \quad 13-14 \quad 14-15 \quad 15-16 \quad 16-17
isolated ring systems :
containing 1 : 12 :
```

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:CLASS 20:CLASS 21:CLASS 23:CLASS 24:CLASS

L1 STRUCTURE UPLOADED

=> d 11 L1 HAS NO ANSWERS L1 STR



Structure attributes must be viewed using STN Express query preparation.

=>]s 11

]S IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> s 11 full

FULL SEARCH INITIATED 14:06:16 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 438 TO ITERATE

100.0% PROCESSED 438 ITERATIONS 54 ANSWERS

SEARCH TIME: 00.00.01

L2 54 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 178.36 178.57

FILE 'CAPLUS' ENTERED AT 14:06:23 ON 01 APR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 1 Apr 2008 VOL 148 ISS 14 FILE LAST UPDATED: 31 Mar 2008 (20080331/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s 12 full L3 138 L2

=> d ibib abs hitstr tot

ANSWER 1 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN L3

ACCESSION NUMBER: 2008:192011 CAPLUS

DOCUMENT NUMBER: 148:222057

Oral polyvinyl alcohol capsules comprising proton pump TITLE:

inhibitors, for reduction and/or prevention of

gastrointestinal disorders

INVENTOR(S): Baecklund, Gunilla; Loevgren, Kurt

PATENT ASSIGNEE(S): Astrazeneca AB, Swed. SOURCE: PCT Int. Appl., 38pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
KIND DATE
           PATENT NO.
                                                                                                 APPLICATION NO.
                                                                                                                                                       DATE
                                                      ----
                                                                                                   ______
           WO 2008018825
                                                        A1 20080214 WO 2007-SE710
                                                                                                                                                        20070808
                    W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
                   W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
                              GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
                              BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:
```

US 2006-836722P P 20060810 US 2006-863161P P 20061027

The present invention relates to an oral pharmaceutical dosage form AΒ comprising a proton pump inhibitor characterized in that the dosage form is in the form of a capsule comprising a pharmaceutical formulation containing a proton pump inhibitor, optionally other pharmaceutically acceptable excipient(s) and optionally addnl. pharmaceutically active substance(s), and the capsule material comprises a polyvinyl alc. or a polyvinyl alc. derivative or a mixture thereof. The present invention also relates to a process for manufacturing the oral pharmaceutical dosage form and to the use in medicine thereof. Thus, hard capsules comprising polyvinyl alc. (PVA) and hard capsules comprising gelatin were filled with enteric coating layered units corresponding to a dose of 10 mg omeprazole, kept in glass bottles without desiccant and stored in accelerated conditions of 50°C as well as $40\,^{\circ}\text{C}/75\%$ relative humidity. The level of degradation products and impurities was measured after 2 and 4 mo, as follows: 0.4% and 0.9% for PVA capsule vs. 1.6% and 2.3% for gelatin capsule stored at 50°C, resp.; 0.6% and 7.7% for PVA capsule vs.0.9% and 22.5% for gelatin capsule stored at $40^{\circ}\text{C}/75\%$ relative humidity, resp.

113712-98-4, Tenatoprazole ΙT

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oral polyvinyl alc. capsules comprising proton pump inhibitors, for reduction and/or prevention of gastrointestinal disorders)

113712-98-4 CAPLUS RN

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:166951 CAPLUS

TITLE: Improved synthetic approach to tenatoprazole

AUTHOR(S): Dai, Liyan; Fan, Dongbo; Wang, Xiaozhong; Chen, Yingqi CORPORATE SOURCE: Institute of Pharmaceutical Engineering, College of

Materials Science and Chemical Engineering, Zhejiang University, Zhejiang, Hangzhou, Peop. Rep. China

SOURCE: Synthetic Communications (2008), 38(4), 576-582

CODEN: SYNCAV; ISSN: 0039-7911

PUBLISHER: Taylor & Francis, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

AB An improved synthetic approach to tenatoprazole I was described. It started from 2,3,5-trimethyl-4-nitropyridine-N-oxide with acetic anhydride via rearrangement and hydrolysis to give 2-hydroxymethyl-3,5-dimethyl-4-nitropyridine, chlorination with SOC12 yielded 2-chloromethyl-3,5-dimethyl-4-nitropyridine hydrochloride (II), then II condensed with 2-mercapto-5-methoxyimidazole[4,5-b]pyridine to give 5-methoxy-2-[(4-nitro-3,5-dimethyl-2-pyridinyl)methylthio]imidazole[4,5-b]pyridine (III). At last the title compound I was produced by two methods: the compound III was oxidized with MCPBA and then methoxylated with CH30Na to give I and III was first methoxylated with CH30Na and then oxidized with MCPBA to give I. The overall yield was around 26% for both five-step syntheses.

IT INDEXING IN PROGRESS

IT 113712-98-4P, Tenatoprazole

RL: SPN (Synthetic preparation); PREP (Preparation) (improved preparation of tenatoprazole starting from trimethyl-nitropyridine-

N-oxide and acetic anhydride via rearrangement, hydrolysis, chlorination, condensation, oxidation, and methoxylation)

RN 113712-98-4 CAPLUS

ANSWER 3 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN 1.3

ACCESSION NUMBER: 2008:156892 CAPLUS

DOCUMENT NUMBER: 148:183454

TITLE: Amyloid β production regulator containing proton

pump inhibitor

INVENTOR(S): Okochi, Masayasu; Tagami, Shinji; Takeda, Masatoshi;

Itoh, Naohiro

Osaka University, Japan; Juridical Foundation Osaka PATENT ASSIGNEE(S):

Industrial Promotion Organization; Shionogi & Co.,

SOURCE: PCT Int. Appl., 31pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.					KIN	D	DATE		i	APPL	ICAT		DATE				
WO :	WO 2008016002					_	2008	0207		WO 2	007-	JP64:	 872		2	0070	730
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,
		GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM									
RITY	APP:	LN.	INFO	. :						JP 2	006-	2080	16	i	A 2	0060	731

PRIORITY APPLN. INFO.: OTHER SOURCE(S): MARPAT 148:183454

It is intended to provide an Ayloid β production regulator which contains as the active ingredient a compound having a proton pump (H+/K+ATPase) inhibitory effect. The above regulator is useful as a drug for preventing and/or treating neurodegenerative diseases based on $A\beta$ sedimentation such as Alzheimer's disease and Down's syndrome. Thus, the effects of lansoprazole, tenatoprazole, and rabeprazole on inhibition of Aetaproduction in HEK293 cells were examined

ΙT 113712-98-4, Tenatoprazole

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(amyloid β production regulator containing proton pump inhibitor)

RN 113712-98-4 CAPLUS

3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-CN pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & Me \\ \hline OMe \\ \end{array}$$

11 REFERENCE COUNT: THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:125851 CAPLUS

DOCUMENT NUMBER: 148:198662

TITLE: Oral compositions and methods for inhibiting gastric

acid secretion using derivatives of small dicarboxylic

acids in combination with PPI

INVENTOR(S): Marash, Michael; Kostadinov, Aleksey; Atorot, Tal

PATENT ASSIGNEE(S): Vecta, Ltd., Israel SOURCE: PCT Int. Appl., 27pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.					D	DATE APPLICATION NO.							DATE			
WO	2008	0126	 21		A2	_	2008	0131	,	WO 2	 007-	 IB20	 28		2	0070	719
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,
		GH,	GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM									
RIT	APP	LN.	INFO	.:						US 2	006-	8329	44P		P 2	0060	725
,1/T T -	L ZILL	T11.4 •	T141 O	• •						00 2	000	0525	111			0000	, _

PRIORITY APPLN. INFO.: US 2006-832944P P 20060725 US 2006-857132P P 20061107 AB The present invention is related to novel oral compns. comprising an

AB irreversible gastric H+/K+-ATPase proton pump inhibitor (PPI) as a gastric acid secretion inhibitor and one or more aliphatic carboxylic acid derivative mols. which activate parietal cells, wherein the derivs. possess delayed or sustained enhancement effect on the PPI activity compared to the non-derivatized acid mols. The present invention further relates to a method of using such compns. to reduce gastric acid secretion in a mammal. Thus, rats were administered (per os) with succinic acid (SA, 14.88 mg/kg), monomethyl ester of succinic acid (mS, 16.65 mg/kg) or di-Me ester of succinic acid (dmS, 17.65 mg/kg) using gavage, and gastric juice examined Oral administration of di-Me ester of succinic acid (dmS) as well as the monomethyl ester of succinic acid (mS) were found effective in enhancing gastric output; SA did not show effect. These results indicated that the di-Me and monomethyl ester derivs. of succinic acid are capable in enhancing gastric acid output even after 60 min from dosing, suggesting delayed or sustained effect of the derivs. on gastric acid output compared to the non-derivatized succinic acid.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oral compns. and methods for inhibiting gastric acid secretion using derivs. of small dicarboxylic acids in combination with PPI)

RN 113712-98-4 CAPLUS

L3 ANSWER 5 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:1639 CAPLUS

DOCUMENT NUMBER: 148:128239

TITLE: Medicinal formulation containing proton pump inhibitor

and hydrotalcite

INVENTOR(S): Chen, Xiuyi; Feng, Guangling; Liu, Zengqiang; Li,

Zhenzhi

PATENT ASSIGNEE(S): Institute of Pharmaceutical Industry of Shandong

Province, Peop. Rep. China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 14pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101091719	A	20071226	CN 2007-10016126	20070702
PRIORITY APPLN. INFO.:			CN 2007-10016126	20070702

AB The title medicinal formulation (tablet, capsule, granule or dried suspension) is composed of (by%): proton pump inhibitor including benzimidazole derivs. such as omeprazole, lansoprazole, pantoprazole, etc., or their salts 0.2-2, hydrotalcite 10-95, diluting agent 0-85, corrective 0-60, adhesive 0-20, and a suitable amount of lubricant. The medicinal formulation is prepared by: (1) mixing raw materials with adjuvant, tableting, and filling in capsule or filling in bag, or (2) dryor wet-granulating, mixing with lubricant, then tableting, and filling in capsule or filling in bag.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(medicinal formulation containing proton pump inhibitor and hydrotalcite)

RN 113712-98-4 CAPLUS

L3 ANSWER 6 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1448792 CAPLUS

DOCUMENT NUMBER: 148:62053

TITLE: Combinations of proton pump inhibitors, sleep aids,

buffers and pain relievers

INVENTOR(S):
Hall, Warren; Proehl, Gerald T.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 34pp., Cont.-in-part of U.S.

Ser. No. 982,369.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
					_	
	US 20070292498	A1	20071220	US 2007-818869		20070615
	US 20050244517	A1	20051103	US 2004-982369		20041105
PRIO	RITY APPLN. INFO.:			US 2003-517743P	P	20031105
				US 2004-982369	Α2	20041105

AB Pharmaceutical compns. comprising a proton pump inhibitor, one or more buffering agent, a sleep aid and acetaminophen, ibuprofen, aspirin or naproxen are described. Methods are described for treating gastric acid related disorders and inducing sleep, using pharmaceutical compns. comprising a proton pump inhibitor, a buffering agent, a sleep aid and a pain reliever.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combinations of proton pump inhibitors and sleep aids and buffers and pain relievers)

RN 113712-98-4 CAPLUS

L3 ANSWER 7 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1280905 CAPLUS

DOCUMENT NUMBER: 148:17608

TITLE: Chewable tablet of proton pump inhibitor for treating

digestive system diseases

INVENTOR(S): Ye, Dong; Li, Xiaoxin; Dai, Yan

PATENT ASSIGNEE(S): Jiangsu Aosaikang Pharmaceutical Co., Ltd., Peop. Rep.

China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 15pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	CN 101066279	A	20071107	CN 2007-10023576	20070608
PRIOR	RITY APPLN. INFO.:			CN 2007-10023576	20070608
AB	The chewable tablet	contai	ns at least o	one proton pump inhibito	ors $1-5$, at
	least one carbonates	35-60	, at least or	ne hvdroxides 35-60%, a	nd also

The chewable tablet contains at least one proton pump inhibitors 1-5, at least one carbonates 35-60, at least one hydroxides 35-60%, and also contains some suitable amount of excipient, disintegrating agent, adhesive, flavouring agent, and lubricant. The proton pump inhibitor is omeprazole, S-omeprazole, pantoprazole, lansoprazole, rabeprazole, leminoprazole, tenatoprazole and its salt. The carbonate is selected from NaHCO3, Na2CO3, MgCO3, CaCO3, or mixture thereof, and the hydroxide is selected from Mg(OH)2, Ca(OH)2, Al(OH)3, NaOH, or mixture thereof. The excipient is lactose, sorbitol, maltodextrin, etc. The disintegrating agent is crosslinking povidone, low-substituted hydroxypropyl methylcellulose, etc. The flavouring agent is aspartame, sucralose, mannitol, etc. The lubricant is magnesium stearate, talc powder, pulverized silica gel, calcium stearate, and stearic acid. The chewable tablet may be used for treating gastric, duodenal and stomal ulcer, and reflux esophagitis, zollinger-ellison syndrome, etc.

IT 113712-98-4, Tenatoprazole

RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chewable tablet of proton pump inhibitor for treating digestive system diseases)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ \hline N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

L3 ANSWER 8 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1280667 CAPLUS

DOCUMENT NUMBER: 148:17562

TITLE: New disintegrant tablet formulation of proton pump

inhibitor for treating digestive system diseases

INVENTOR(S): Ye, Dong; Chen, Xiangfeng; Dai, Yan

PATENT ASSIGNEE(S): Jiangsu Aosaikang Pharmaceutical Co., Ltd., Peop. Rep.

China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 16pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101066251 PRIORITY APPLN. INFO.:	А	20071107	CN 2007-10023577 CN 2007-10023577	20070608 20070608

AB The invention provides a new disintegrant tablet formulation of proton pump inhibitor for treating digestive system diseases. The disintegrant tablet contains at least one proton pump inhibitor, and at least one buffering agents at a weight ratio of 1:(10-200), and also contains excipient, disintegrating agent, flavoring agent, and lubricant. The proton pump inhibitor is selected from one of omeprazole, S-omeprazole, pantoprazole, lansoprazole, rabeprazole, leminoprazole, and tenatoprazole or their salts. The buffering agent is NaHCO3, Na2CO3, MgCO3, Mg(OH)2, CaCO3, Ca(OH)2, Al(OH)3, NaOH, amino acid, or mixture thereof. The disintegrant tablet can be used for treating gastric ulcer, duodenal ulcer, reflux esophagitis, Zollinger-Ellison syndrome, etc.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(new disintegrant tablet formulation of proton pump inhibitor for treating digestive system diseases)

RN 113712-98-4 CAPLUS

L3 ANSWER 9 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1278739 CAPLUS

DOCUMENT NUMBER: 147:528135

TITLE: Compositions and methods for inhibiting gastric

acidity using endoperoxide bridge-containing compounds

INVENTOR(S): Marash, Michael
PATENT ASSIGNEE(S): Vecta, Ltd., Israel
SOURCE: PCT Int. Appl., 43pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					D DATE APPLICATION						ION I	NO. DATE				
WC	WO 2007125397			A2 20071108			1	WO 2	007-	IB10	 78		2	0070	425		
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,
		GD,	GE,	GH,	GM,	GΤ,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚM,
		KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	ΜZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,
		GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	AZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM									
PRIORIT	Y APP	LN.	INFO	.:					1	US 2	006-	7951	65P]	P 2	0060	427
									1	US 2	006-	8437	05P]	P 2	0060	912
									1	US 2	006-	8608	03P]	P 2	0061	124

OTHER SOURCE(S): MARPAT 147:528135

AB The present invention provides compns. to be used in conditions in which the reduction of gastric acidity or inhibition of gastric acid secretion is beneficial. The compns. comprise one or more endoperoxide-bearing compds. effective in the inhibition of gastric acid secretion or in reducing gastric acidity. The compns. of the present invention preferably further comprise a substituted benzimidazole H+/K+-ATPaSe proton pump inhibitor (PPI) or H2 blocker in order to obtain more effective reduction of gastric acidity or inhibition of gastric acid secretion. Thus, i.v. composition was prepared containing artesunate 40 mg/kg and indomethacin 9.3 mg/kg.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. and methods for inhibiting gastric acidity using endoperoxide bridge-containing compds.)

RN 113712-98-4 CAPLUS

L3 ANSWER 10 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1203188 CAPLUS

DOCUMENT NUMBER: 147:486439

TITLE: A process for the preparation of ((pyridin-2-

ylmethyl)sulfinyl)-1H-benzimidazoles from

((1-oxopyridin-2-ylmethyl)sulfanyl)-1H-benzimidazoles

in the presence of transition metal catalysts Allegrini, Pietro; Rasparini, Marcello; Razzetti,

Gabriele; Rossi, Roberto; Ventimiglia, Gianpiero

PATENT ASSIGNEE(S): Dipharma Francis S.r.l., Italy

Eur. Pat. Appl., 12pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

SOURCE:

	PATENT NO.						D	DATE APPLICATION NO.							DATE				
	EP	1847	 538			A1	_	2007	1024	-	EP	200	 7-7	754			2	0070	 417
		R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, E	S,	FI,	FR,	GB,	GR,	HU,	ΙE,
			IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	MT,	NL	, P	L,	PT,	RO,	SE,	SI,	SK,	TR,
			AL,	BA,	HR,	MK,	ΥU												
	CA	2585	602			A1		2007	1021	(CA	200	7-2	5856	602		2	0070	420
	CN	1010	5857	1		A		2007	1024	(CN	200	7-1	0104	4432		2	0070	420
	US	2007	02496	662		A1		2007	1025	Ţ	IJS	200	7-7	3785	52		2	0070	420
	IN	2007	KO006	622		A		2007	1102		IN	200	7-K	0622	2		2	0070	420
	JΡ	2007	29110	01		А		2007	1108		JΡ	200	7-1	.1178	39		2	0070	420
PRIOF	RITS	APP	LN.	INFO	. :					-	ΙT	200	6-M	1178	7		A 2	0060	421
											ΙT	200	6-M	II 194	49		A 2	0061	011
00000			(0)			0701		m 1 1	7 40	- 100	2.0		- m	1 1 7	400	400			

OTHER SOURCE(S): CASREACT 147:486439; MARPAT 147:486439

GΙ

AB A process for the preparation of ((pyridin-2-ylmethyl)sulfinyl)-1H-benzimidazoles I [wherein Q = (un)substituted CH or N; R1 - R8 = H, halo, OH, nitro, etc.] or its salts were prepared from the corresponding ((1-oxopyridin-2-ylmethyl)sulfanyl)-1H-benzimidazoles II (Q, R1 - R8 =

same as above) in the presence of transition metal catalysts.

(preparation of ((pyridinylmethyl)sulfinyl)benzimidazoles from ((oxopyridinylmethyl)sulfanyl)benzimidazoles in the presence of transition metal catalysts)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 11 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN T.3

2007:1197863 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 147:433855

Chiral separation of tenatoprazole enantiomers using TITLE:

> high performance liquid chromatography on vancomycin-bonded chiral stationary phase

AUTHOR(S): Guan, Jin; Yang, Jing; Bi, Yujin; Shi, Shuang; Li,

Famei

CORPORATE SOURCE: School of Pharmacy, Shenyang Pharmaceutical University, Shenyang, 110016, Peop. Rep. China

SOURCE: Sepu (2007), 25(5), 732-734

CODEN: SEPUER; ISSN: 1000-8713

PUBLISHER: Kexue Chubanshe

DOCUMENT TYPE: Journal LANGUAGE: Chinese

Vancomycin-bonded chiral stationary phase was used for the direct chiral separation of tenatoprazole enantiomers using reversed-phase high performance liquid chromatog. (HPLC). The influences of the kinds and concentration of buffer

and organic modifier, the pH value of buffer, column length and column temperature

on the separation were examined The chiral HPLC method for the separation of tenatoprazole enantiomers on a Chirobiotic V column (150 mm + 4.6mm, 5 μ m) was established with simplicity and good reproducibility using 0.02 mol/L ammonium acetate buffer (pH 6.0)-tetrahydrofuran (93:7, volume/volume) as the mobile phase at a flow rate of 0.5 mL/min and 20°. Under the above conditions, the enantiomers were separated on baseline with the resolution of 1.68. The relative standard deviations (RSDs) for the retention times of tenatoprazole enantiomers were 0.48% and 0.49%(n = 6). The RSDs for the peak areas of tenatoprazole enantiomers were 0.45% and 0.55% (n = 6).

113712-98-4, Tenatoprazole 705968-86-1 ΙT 705969-00-2

RL: ANT (Analyte); ANST (Analytical study)

(resolution of tenatoprazole enantiomers by reversed phase HPLC on vancomycin-bonded chiral stationary phase)

RN 113712-98-4 CAPLUS

3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-CN pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

RN 705968-86-1 CAPLUS

3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-CN pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L3 ANSWER 12 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1071866 CAPLUS

DOCUMENT NUMBER: 147:433461

TITLE: GI capsules containing combination of proton pump

inhibitors and stimulators for improving the

gastrointestinal motility

INVENTOR(S): Li, Xiaotao; Dai, Chengxiang; Wang, Yan; Wang, Wenyan;

Yu, Duo; Li, Hua; Lin, Yajun

PATENT ASSIGNEE(S): Beijing Hafo Biomedical Research Center, Inc., Peop.

Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101036787	A	20070919	CN 2006-10065009	20060317
PRIORITY APPLN. INFO.:			CN 2006-10065009	20060317

AB The title gastrointestinal complex capsule for treating digestive system ulcer, gastroesophageal reflux disease, and gastritis contains proton pump inhibitor or its stereoisomer or medical salt, gastrointestinal dynamic medicine or its medical salt, and medical matrix or excipient. The title gastrointestinal complex capsule is composed of capsule cap with gastric solubility and capsule material with intestinal solubility. The proton pump inhibitor may be one of omeprazole, lansoprazole, leminoprazole, esomeprazole, rabeprazole, perprazole, pantoprazole, and/or tenatoprazole. The gastrointestinal dynamic medicine may be one of dopamine receptor antagonists such as domperidone, itopride, metoclopramide, and/or 5HT4 agonist such as cisapride, mosapride, prucalopride, or tegaserod.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (gastrointestinal capsules containing combination of proton pump inhibitors and stimulators for improving the gastrointestinal motility)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

L3 ANSWER 13 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:919537 CAPLUS

DOCUMENT NUMBER: 147:330275

TITLE: Pharmaceutical compositions containing antibiotics and

proto pump inhibitors for treating Helicobacter

infection in stomach pylorus

INVENTOR(S): Wang, Ruijie; Shen, Zhenhong; Li, Chunru

PATENT ASSIGNEE(S): Shenyang Dongyu Pharmaceutical Co., Ltd, Peop. Rep.

China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 23pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101015694	A	20070815	CN 2006-10045806	20060207
PRIORITY APPLN. INFO.:			CN 2006-10045806	20060207
AB The title compns.	are comp	osed of pro	ton pump inhibitor.	gastric mucosa

The title compns. are composed of proton pump inhibitor, gastric mucosal protective agent, and antibiotics. The proton pump inhibitors are selected from omeprazole, esomeprazole, lansoprazole, pantoprazole, rabeprazole, tenatoprazole, leminoprazole, and their magnesium or other metal salts. The antibacterial compds. are selected from two of β -lactam antibiotics, macrolide antibiotics, and other antibacterial medicines. The gastric mucosal protective agents are selected from bismuth agent, sucralfate, marzulene-S, prostaglandin, terpene derivs., aluminum magnesium carbonate, growth factor, antioxidant, dosmalfate, and carbenoxolone.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. containing antibiotics and proto pump inhibitors for treating Helicobacter infection in stomach pylorus)

RN 113712-98-4 CAPLUS

L3 ANSWER 14 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:872604 CAPLUS

DOCUMENT NUMBER: 147:322979

TITLE: Method for preparing chiral sulfoxides, especially

S-omeprazole, S-lansoprazole, S-pantoprazole,

S-rabeprazole and S-tenatoprazole

INVENTOR(S): Wang, Qinghe; Cheng, Maosheng

PATENT ASSIGNEE(S): Shenyang Pharmaceutical University, Peop. Rep. China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 6pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101012141	A	20070808	CN 2007-10010273	20070202
PRIORITY APPLN. INFO.:			CN 2007-10010273	20070202

OTHER SOURCE(S): CASREACT 147:322979

AB The invention provides a method for the preparation of chiral sulfoxides, which comprises oxidizing the corresponding sulfides with peroxides in the presence of titanium or zirconium tetraalkoxides and chiral β -amino alcs. The method was successfully applied to the synthesis of S-omeprazole, S-lansoprazole, S-pantoprazole, S-rabeprazole, and S-tenatoprazole, which are useful as proton pump inhibitors.

IT 705968-86-1P, S-Tenatoprazole

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of chiral sulfoxides, especially S-omeprazole, S-lansoprazole, S-pantoprazole, S-rabeprazole, S-tenatoprazole, oxidation of sulfides using β -amino alcs. as chiral ligands)

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 113713-24-9

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of chiral sulfoxides, especially S-omeprazole, S-lansoprazole, S-pantoprazole, S-rabeprazole, S-tenatoprazole, oxidation of sulfides using β -amino alcs. as chiral ligands)

RN 113713-24-9 CAPLUS

L3 ANSWER 15 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:846024 CAPLUS

DOCUMENT NUMBER: 147:197418

TITLE: Pharmaceutical formulations for inhibiting acid

secretion

INVENTOR(S): Hall, Wareen; Olmstead, Kay; Weston, Laura

PATENT ASSIGNEE(S): Santarus, Inc., USA SOURCE: PCT Int. Appl., 125pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE		APPLICATION NO.						DATE			
WO	WO 2007086846					A1 20070802				WO 2006-US2746					20060124		
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BΖ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KN,	KP,	KR,
		KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,
		VN,	YU,	ZA,	ZM,	ZW											
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM										

PRIORITY APPLN. INFO.:

WO 2006-US2746

20060124

AB In one general aspect of the present invention, pharmaceutical formulations comprising both a proton pump inhibitor microencapsulated or dry coated with a material that enhances the shelf-life of the pharmaceutical composition and one or more antacid are described. In another general aspect of the present invention, pharmaceutical formulations comprising both a proton pump inhibitor microencapsulated or dry coated with a taste-masking material and one or more antacid are described. Omeprazole was microencapsulated using spinning disk atomization or spray drying. Cellulose derivs. were used in the microencapsulation process and drug dissoln. and pharmacokinetics were determined

IT 113712-98-4, Tenatoprazole

RL: TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical formulations for inhibiting acid secretion)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 16 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:814044 CAPLUS

DOCUMENT NUMBER: 147:173675

TITLE: Pharmaceutical compositions comprising a proton pump

inhibitor and protein component

INVENTOR(S): Phillips, Jeffrey O.

PATENT ASSIGNEE(S): The Curators of the University of Missouri, USA

SOURCE: PCT Int. Appl., 31pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT I	. O <i>V</i>			KIND		DATE			APPLICATION NO.						DATE		
	2007) 2007)				A2 A3		2007 2007	0726		WO 2	007-	 US60	 723			0070		
		AE, CN, GE, KP, MN, RS,	AG, CO, GH, KR, MW, RU,	AL, CR, GM, KZ, MX, SC,	AM, CU, GT, LA, MY, SD,	CZ, HN, LC, MZ, SE,	AU, DE, HR, LK, NA, SG, VC,	DK, HU, LR, NG, SK,	DM, ID, LS, NI, SL,	DZ, IL, LT, NO, SM,	EC, IN, LU, NZ, SV,	EE, IS, LV, OM,	EG, JP, LY, PG,	ES, KE, MA, PH,	FI, KG, MD, PL,	GB, KM, MG, PT,	GD, KN, MK, RO,	
PRIORITY		IS, CF, GM, KG,	IT, CG, KE, KZ,	LT, CI, LS, MD,	LU, CM, MW,	LV, GA, MZ,	CZ, MC, GN, NA, TM,	NL, GQ, SD,	PL, GW, SL, EA,	PT, ML, SZ,	RO, MR, TZ, OA	SE, NE, UG,	SI, SN, ZM,	SK, TD, ZW,	TR, TG, AM,	BF, BW, AZ,	BJ, GH, BY,	
TICTORCETT	L .		T 1 1 1	• •						00 2		, 002	O O L			0000		

OTHER SOURCE(S): MARPAT 147:173675

AB The present disclosure relates to, inter alia, pharmaceutical compns. comprising a H+K+-ATPase proton pump inhibitor and a protein component; to methods for manufacture of such compns., and to use of such compns. in treating and preventing diseases and/or disorders. Thus, a formulation contained hydrolyzed whey isolate 3000, sucralose 200, dextrose 200, aspartame 200, neotame 3, and pantoprazole 40 mg.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. comprising proton pump inhibitor and protein component)

RN 113712-98-4 CAPLUS

L3 ANSWER 17 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:783432 CAPLUS

DOCUMENT NUMBER: 147:268252

TITLE: Synthesis of tenatoprazole

AUTHOR(S): Wang, Decai; Hu, Xiaoxi; Zhou, Qin

CORPORATE SOURCE: School of Life Science and Pharmaceutics, Nanjing

University of Technology, Nanjing, 210009, Peop. Rep.

China

SOURCE: Zhongguo Yaoke Daxue Xuebao (2006), 37(3), 284-285

CODEN: ZHYXE9; ISSN: 1000-5048

PUBLISHER: Zhongquo Yaoke Daxue

DOCUMENT TYPE: Journal LANGUAGE: Chinese

OTHER SOURCE(S): CASREACT 147:268252

AB A new proton pump inhibitor tenatoprazole was synthesized. 2, 6-Dichloropyridine was subject to be 3-nitrified, 2-ammoniated, 6-substituted by sodium methoxide, then reduced and finally cycled to generate 5-methoxy-2-mercapto-imidazole-[4,5-b]pyridine(VI). The compound VI was condensed with 2-chloromethyl-4-methoxy-3, 5-dimethyl-pyridine and then oxygenated to yield tenatoprazole. The overall yield of the reaction was 20.9 %, and the structure was confirmed by1H NMR and MS. Synthetic route and methods are feasible in the tenatoprazole preparation with the yield consistent with the reports.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synthesis of tenatoprazole)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

IT 113713-24-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of tenatoprazole)

RN 113713-24-9 CAPLUS

L3 ANSWER 18 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:771956 CAPLUS

DOCUMENT NUMBER: 147:508390

TITLE: A new coating process for gastro-degradable substances

INVENTOR(S): Kumar, T. Mahesh; Veerababu, T.; Belapure, S. G.

PATENT ASSIGNEE(S): Cadila Healthcare Limited, India

SOURCE: Indian Pat. Appl., 14pp.

CODEN: INXXBQ

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2005MU00721	A	20070706	IN 2005-MU721	20050620
PRIORITY APPLN. INFO.:			IN 2005-MU721	20050620

AB Oral pharmaceutical preparation for use in the prevention and treatment of disorders associated with gastro esophageal reflux is disclosed. The preparation

comprises of a drug loaded pellets, said drug being selected from proton pump inhibitor and gastro degradable substances, a first layer consisting of a separating layer of sodium alginate on said drug loaded pellets and a second layer consisting of a coating of acrylic acid co-polymer or enteric polymer.

IT 113712-98-4, Tenatoprazole

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(new coating process for gastro-degradable substances)

RN 113712-98-4 CAPLUS

L3 ANSWER 19 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:770938 CAPLUS

DOCUMENT NUMBER: 148:269329

TITLE: Delayed release tablets for rabeprazole

INVENTOR(S): Shah, Tejas Dilipkumar; Shah, Chitra Siddharth;

Krishan, Anandi

PATENT ASSIGNEE(S): Glenmark Pharmaceuticals Limited, India

SOURCE: Indian Pat. Appl., 32pp.

CODEN: INXXBQ

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2005MU01019	A	20070706	IN 2005-MU1019	20050829
PRIORITY APPLN. INFO.:			IN 2005-MU1019	20050829

AB An oral pharmaceutical composition in a solid dosage form comprising (a) a core comprising a therapeutically effective amount of at least one acid labile, substituted benzimidazole H+/K+-ATPase proton pump inhibitor; and (b) an enteric coating on at least a portion of the core, wherein the composition provides a delayed release of the at least one acid labile, substituted benzimidazole H+/K+-ATPase proton pump inhibitor.

IT 113712-98-4D, Tenatoprazole, derivs.

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (delayed release tablets for rabeprazole)

RN 113712-98-4 CAPLUS

L3 ANSWER 20 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:764966 CAPLUS

DOCUMENT NUMBER: 147:235162

TITLE: Method for preparing chiral proton pump inhibitor

INVENTOR(S): Wang, Qinghe; Cheng, Maosheng

PATENT ASSIGNEE(S): Shenyang Pharmaceutical University, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 6pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1995037	A	20070711	CN 2006-10172184	20061231
PRIORITY APPLN. INFO.:			CN 2006-10172184	20061231

OTHER SOURCE(S): CASREACT 147:235162

AB The title chiral sulfoxide proton pump inhibitor is prepared by catalytically oxidizing the prochiral sulfide compound in the presence of chiral tartrate derivative and vanadium alkoxide. The obtained single enantiomer (or enantiomer rich) chiral sulfoxide proton pump inhibitor includes: S-omeprazole, S-lansoprazole, S-pantoprazole, S-rabeprazole, S-tenatoprazole and their basic salts (pharmaceutically acceptable). This method has the advantages of high raw material utilization, and simple preparation process.

IT 113713-24-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of chiral proton pump inhibitor by oxidation of sulfide in prepsence of tartrate and vanadium alkoxide)

RN 113713-24-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (CA INDEX NAME)

IT 705968-86-1P, S-Tenatoprazole

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of chiral proton pump inhibitor by oxidation of sulfide in prepsence of tartrate and vanadium alkoxide)

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L3 ANSWER 21 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:720484 CAPLUS

DOCUMENT NUMBER: 147:101954

TITLE: Pharmaceutical compositions for the eradication of

Helicobacter pylori

INVENTOR(S): Miralles, Ricardo; Torres, Jesus; Sune, Josep M.

PATENT ASSIGNEE(S): Ferrer Internacional, S.A., Spain

SOURCE: Eur. Pat. Appl., 16pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					D	DATE	DATE Z			ICAT	-			DATE			
	1803				A1	20070704				EP 2006-100029						20060103		
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	ΙT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	
		BA,	HR,	MK,	YU													
WO	2007	0771	58		A1		2007	0712		WO 2	006-	EP70	129		2	0061	221	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	ВG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KN,	
		KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	
		MN,	MW,	MX,	MY,	${ m MZ}$,	NΑ,	NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW							
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ΒJ,	
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,	
		GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	AΖ,	BY,	
		KG,	KΖ,	MD,	RU,	ΤJ,	$^{\mathrm{TM}}$											

PRIORITY APPLN. INFO.:

EP 2006-100029 A 20060103

AB A pellet composition is disclosed for oral administration comprising simultaneously a proton pump inhibitor, a clarithromycin compound and an amoxicillin compound Said compns. are suitable to be filled in sachets and are useful in the treatment of disorders associated with Helicobacter bacteria.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(pharmaceutical compns. for the eradication of Helicobacter pylori)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 22 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:675827 CAPLUS

DOCUMENT NUMBER: 147:150926

TITLE: Freeze-dried powders of tenatoprazole for injection as

stomach antacids

INVENTOR(S): Gao, Yuan; Chen, Binhua; Xia, Lingyun; Chen, Qiufen;

Cao, Wenjun; Yang, Yijing

PATENT ASSIGNEE(S): Xinyi Pharmaceutical Plant, Peop. Rep. China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 15pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1981760	A	20070620	CN 2005-10111465	20051214
PRIORITY APPLN. INFO.:			CN 2005-10111465	20051214

The title freeze-dried powders are composed of (by weight parts) tenatoprazole 1-50, excipients 10-500, pH regulators 1-50, and additives, and the ratio of tenatoprazole to pH regulators is 0.25-15:1. The excipients may be one or more of sodium chloride, mannitol, and dextran. The pH regulators may be one or more of sodium hydroxide, sodium biphosphate, sodium dihydrogen phosphate, sodium phosphate, and sodium citrate. The additive may be one or more of sodium bisulfite, sodium sulfite, and sodium thiosulfate. The title method comprises of dissolving tenatoprazole, excipients, and pH regulators with water for injection, filtering with a microporous film, freeze-drying for 5-7 h, and evacuating at 0 °C for 28-32 h, and then at 10 °C for 2.5-3.5 h. The powders have good stability.

IT 113712-98-4, Tenatoprazole

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(freeze-dried powders of tenatoprazole for injection as stomach antacids)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

L3 ANSWER 23 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:675691 CAPLUS

DOCUMENT NUMBER: 147:143434

TITLE: Process for synthesis of 2-mercapto-5-

methoxyimidazo[4,5-b]pyridine

INVENTOR(S):
Jia, Dong

PATENT ASSIGNEE(S): Tianjin Wisdom Chemicals Co., Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 5pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1982311	A	20070620	CN 2005-10122305	20051213
PRIORITY APPLN. INFO.:			CN 2005-10122305	20051213

OTHER SOURCE(S): CASREACT 147:143434

AB Title process comprises (1) reacting 2,6-dichloro-3-nitropyridine and ammonia in ethanol for 2-amino-3-nitro-6-chloropyridine; ethanol recrystn. for product with content>99%; (2) reacting 2-amino-3-nitro-6-chloropyridine in the presence of sodium hydroxide in methanol, stirring, adding product from step (1), cooling, filtering, water washing, acetone recrystn. for product with content >99%; (3) mixing product from step (2), sodium sulfide, water and polyethylene glycol catalyst together, refluxing, cooling, adding carbon disulfide, cooling, stirring for 1-2 h, acetic acid acidifying, filtering, water washing, drying, recrystn. with 95% ethanol, decolorizing with active carbon, cooling, filtering.

IT 113712-98-4P, Tenatoprazole

RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis of 2-mercapto-5-methoxyimidazo[4,5-b]pyridine)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

L3 ANSWER 24 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:672499 CAPLUS

DOCUMENT NUMBER: 147:102150

TITLE: Pharmaceutical composition comprising inhibitors of

proton pump and Heliobacter pylori and a buffering

agent

INVENTOR(S): Phillips, Jeffrey O.

PATENT ASSIGNEE(S): The Curators of the University of Missouri, USA

SOURCE: PCT Int. Appl., 44pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.					D	DATE			APPLICATION NO.					DATE			
WO	WO 2007070164				A1 20070621			0621	WO 2006-US40756						20061018			
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KN,	
		KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	
		MN,	MW,	MX,	MY,	MΖ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW							
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,	
		GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,	
		KG,	KΖ,	MD,	RU,	ΤJ,	TM											

PRIORITY APPLN. INFO.:

US 2005-728125P P 20051019

OTHER SOURCE(S): MARPAT 147:102150

AB The present invention relates to pharmaceutical compns. comprising a proton pump inhibitor or related compound, a buffering agent, and an H. pylori inhibitor. Methods of using such compns. in treatment of H. pylori and other disorders and methods of manufacture of such compns. are also provided. Thus, a formulation contained Omeprazole 10-60, tetracycline 200-1000, and NaHCO3 800-2000 mg.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical composition comprising inhibitors of proton pump and Heliobacter pylori and a buffering agent)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT: 1 THE

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 25 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:618786 CAPLUS

DOCUMENT NUMBER: 147:46138

TITLE: Treatment of diabetes and related diseases with

combinations of gastrin agonists and growth factors

INVENTOR(S): Damiani, Carl; Cruz, Antonio

PATENT ASSIGNEE(S): Waratah Pharmaceuticals, Inc., Can.

SOURCE: PCT Int. Appl., 88pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT 1			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE		
WO	2007	 0625	 31		 A1	_	2007	 0607	,	 WO 2	 006-	 CA19	 76		2	0061	 201
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	ВG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,
		KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MΖ,	NA,	NG,	ΝI,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
	KG, KZ, MD,		RU,	ΤJ,	TM												

PRIORITY APPLN. INFO.:

US 2005-741736P P 20051202 US 2005-742226P P 20051205

AB Methods of treating or preventing diabetes mellitus and related diseases and complications using a combination of gastrin agonists and growth hormones or animal growth regulators is described. The gastrin agonist may be gastrin. The conditions that may be treated include diabetes, hypertension, chronic heart failure, fluid retentive states, obesity, metabolic syndrome and related diseases and disorders. Combinations of gastrin agonists and growth regulatory factors, and gastrin can be selected to provide additive, complementary or synergistic effects.

II 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (treatment of diabetes and related diseases with combinations of gastrin agonists and growth factors)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 26 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:593643 CAPLUS

DOCUMENT NUMBER: 146:528381

TITLE: Composition comprising combination of proton pump

inhibitor and acetyl salicylic acid

INVENTOR(S): Johansson, Dick; Svedberg, Lars-Erik; Nilsson, Lena

PATENT ASSIGNEE(S): Swed.

SOURCE: U.S. Pat. Appl. Publ., 15pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
US	2007	 0122	 470		A1	_	2007	0531		 US 2	 006-	 5638	12		2	0061	128
WO	2007	0642	74		A1		2007	0607		WO 2	006-	SE13	49		2	0061	128
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,
	KP, KR, K		KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	
	MN, MW, MX		MX,	MY,	MΖ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
	KG, KZ, MD,			RU,	ΤJ,	$_{ m TM}$											
RTT7	ZAPP	T.N	TNFO	•						IIS 2	005-	7409	81P		P 2	0051	130

PRIORITY APPLN. INFO.:

US 2005-740981P P 20051130 US 2006-818886P P 20060706

AB The present invention relates to an oral pharmaceutical preparation for use in the prevention and/or reduction of gastrointestinal complications associated with

the use of acetyl salicylic acid. The present preparation comprises a fixed oral dosage form comprising a proton pump inhibitor in combination with acetyl salicylic acid. Furthermore, the present invention refers to a method for the manufacture thereof and the use thereof in medicine. The present invention also relates to a specific combination comprising esomeprazole, or an alkaline salt thereof or a hydrated form of any one of them, and acetyl salicylic acid for use as a medicament for the prevention of thromboembolic vascular events, such as myocardial infarction or stroke, and for the prevention and/or reduction of gastrointestinal complications associated with the use of acetyl salicylic acid. Thus, esomeprazole-Mg trihydrate 445 g was suspended in a water solution containing

the

dissolved binder hydroxypropyl Me cellulose 67 g and the surfactant polysorbate 80 9 g. The suspension was sprayed onto sugar spheres seeds 300 g in a fluidized bed coating apparatus using bottom spray (Wurster) technique. The prepared core material was covered with the subcoating layer in a fluid bed apparatus by spraying a hydroxypropyl cellulose solution 90 g containing suspended talc 340 g and magnesium stearate 22g. The enteric coating layer was sprayed as a water dispersion onto the subcoated pellets obtained above, in a fluid bed apparatus

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (composition comprising combination of proton pump inhibitor and acetyl salicylic acid)

RN 113712-98-4 CAPLUS

ANSWER 27 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN 1.3

2007:561769 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 147:2030

Disulfide bridge conjugate of proton pump inhibitor or TITLE:

other drug with sulfhydryl compound, and use for the

treatment and prophylaxis of gastrointestinal

disorders

INVENTOR(S): Hackett, John Allen

PATENT ASSIGNEE(S): Jon Pty Limited, Australia

PCT Int. Appl., 55pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
APPLICATION NO.
PATENT NO.
                                       KIND
                                                         DATE
                                                                                                                                  DATE
                                         ____
                                                         _____
                                                                                  _____
                                                         20070524 WO 2006-AU1727
WO 2007056817
                                          A1
                                                                                                                                  20061117
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH,
                 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
                 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
                 KG, KZ, MD, RU, TJ, TM
                                                                                   AU 2005-906409
```

PRIORITY APPLN. INFO.:

A 20051117

OTHER SOURCE(S): MARPAT 147:2030

The invention discloses a method for the production of disulfide compds. AB PAC-SA-SB-R* (PAC-SA = residue of pharmaceutically active drug, metabolite thereof, or pharmaceutically acceptable salt thereof, that is covalently bonded via sulfur atom, SA of reduced sulfhydryl, sulfinyl, sulfonyl or sulfonamide group to sulfur atom SB of oxidized sulfhydryl group of pharmacol. acceptable sulfhydryl compound in absence of acid; $R^* = alkyl$, cycloalkyl, aryl, amino acid, etc.). Preferably the pharmaceutically active drug is a proton pump inhibitor and the sulfhydryl compound is N-acetylcysteine. The disulfide compds. according to the invention can be prepared either in vitro or in vivo and are stable in the acidic conditions of the stomach. The invention also discloses pharmaceutical compns. containing compds. of the invention, as well as a method for the treatment or prophylaxis of gastrointestinal disorders using compds. of the invention. Preparation of omeprazole-N-acetylcysteine disulfide is described.

113712-98-4, Tenatoprazole ΙT

RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses) (disulfide bridge conjugates of proton pump inhibitors with sulfhydryl compds. for treatment of gastrointestinal disorders)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

IT 113712-98-4D, Tenatoprazole, conjugates with sulfhydryl compds.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(disulfide bridge conjugates of proton pump inhibitors with sulfhydryl compds. for treatment of gastrointestinal disorders)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & N \\ \end{array}$$
 S - CH₂ N Me OMe

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 28 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:435918 CAPLUS

DOCUMENT NUMBER: 146:428764

TITLE: Salts of proton pump inhibitors and process for

preparing same

INVENTOR(S):
Hackett, John Allen

PATENT ASSIGNEE(S): Jon Pty Limited, Australia

SOURCE: PCT Int. Appl., 37pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT		KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE			
WO	2007	 0417	 90		A1	_	2007	 0419		 WO 2	 006	 AU14	 99		2	0061	011
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BΖ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,
		KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	MY,	MZ,	NΑ,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,
		RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW							
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	AΖ,	BY,
		KG.	KZ.	MD.	RU.	TJ.	TM										

PRIORITY APPLN. INFO.:

AU 2005-905699 A 20051014

AB Disclosed herein is a process for preparing magnesium and magnesium hydroxy salts of proton pump inhibitors (PPI) such as omeprazole, hydroxy omeprazole, s-omeprazole (esomeprazole), r-omeprazole, pantoprazole, lanzoprazole, leminoprazole, rabeprazole, tenatoprazole, mixts. thereof or resp. isomers thereof. The process can be used to prepare magnesium salts of PPIs. In particular the process can also be used to prepare the magnesium hydroxy salts of PPIs which have the formula: (PPI-)x.Mq2+(OH-)2-x.(H2O)z wherein PPI is a proton pump inhibitor, x is 0.0001 to 1.9999, and z is 0 to 10, preferably 0 to 5. Compns. of the salts of the PPIs disclosed herein including pharmaceutical compns. are also disclosed. The magnesium and magnesium hydroxy salts of proton pump inhibitors disclosed herein can be used in the treatment of gastrointestinal disorders such as Ulcus ventriculi, Ulcus duodeni, gastritis, gastric ulcer, duodenal ulcer, irritable bowel owing to an increased production of acid or as a result of medicaments, GERD, Crohn's disease or IBD. Magnesium hydroxy salt of omeprazole was prepared by the reaction of magnesium hydroxide with omeprazole. A tablet contained magnesium hydroxy salt of omeprazole containing 10% imeprazole 200, anhydrous lactose 141, croscarmellose sodium 6.0, and magnesium stearate 3.0 mg.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (salts of proton pump inhibitors and process for preparing same)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline \\ Me & OMe \\ \end{array}$$

8

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 29 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:323712 CAPLUS

DOCUMENT NUMBER: 146:401829

TITLE: Preparation of 2,3-diamino-6-methoxypyridine as

intermediate of tenatoprazole

INVENTOR(S): Zhang, Yueliang; Dai, Jian; Huang, He; Xiang, Chunli;

Chen, Binhua

PATENT ASSIGNEE(S): Sine Laboratories, Peop. Rep. China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 12pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1931842	A	20070321	CN 2005-10029715	20050916
PRIORITY APPLN. INFO.:			CN 2005-10029715	20050916

OTHER SOURCE(S): CASREACT 146:401829

AB The title method includes adding iron powder, solvent, and acid into 2-amino-6-methoxy-3-nitropyridine to obtain 2,3-diamino-6-methoxypyridine which is an intermediate for synthesis of tenatoprazole.

IT 113712-98-4P, Tenatoprazole

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of 2,3-diamino-6-methoxypyridine as intermediate of tenatoprazole)

RN 113712-98-4 CAPLUS

L3 ANSWER 30 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:300816 CAPLUS

DOCUMENT NUMBER: 148:191890

TITLE: Synthesis of tenatoprazole

AUTHOR(S): Bao, Yajie; Su, Bing; Li, Xiaodong; Wang, Yali; Su,

Huanchen

CORPORATE SOURCE: Jilin Institute of Materia Medica, Changchun, Jilin

Province, 130062, Peop. Rep. China

SOURCE: Zhongguo Yiyao Gongye Zazhi (2006), 37(1), 3-4

CODEN: ZYGZEA; ISSN: 1001-8255

PUBLISHER: Zhongguo Yiyao Gongye Zazhi Bianjibu

DOCUMENT TYPE: Journal LANGUAGE: Chinese

AB Tenatoprazole [i.e., 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-3H-imidazo[4,5-b]pyridine] was synthesized from 2,3-diamino-6-methoxypyridine by cyclization with potassium xanthogenate to give 5-methoxy-1H-imidazo[4,5-b]pyridine-2-thiol which subjected to condensation with 2-chloromethyl-3,5-dimethyl-4-methoxypyridine hydrochloride, followed by oxidation with meta-chloroperbenzoic acid. The overall yield was 48%. The target compound is a known H+/K+-ATPase inhibitor, proton pump inhibitor.

IT 113713-24-9P, 5-Methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]-3H-imidazo[4,5-b]pyridine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tenatoprazole (proton pump inhibitor) via synthetic sequence involving cyclization, formation of (mercapto)imidazo[4,5-b]pyridine, condensation with (chloromethyl)dimethyl(methoxy)pyridine and oxidation)

RN 113713-24-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (CA INDEX NAME)

IT 113712-98-4P, Tenatoprazole

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of tenatoprazole (proton pump inhibitor) via synthetic sequence involving cyclization, formation of (mercapto)imidazo[4,5-b]pyridine, condensation with (chloromethyl)dimethyl(methoxy)pyridine and oxidation)

RN 113712-98-4 CAPLUS

L3 ANSWER 31 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:152662 CAPLUS

DOCUMENT NUMBER: 146:176110

TITLE: HPLC determination and pharmacokinetic study of

tenatoprazole in dog plasma after oral administration

of enteric-coated capsule

AUTHOR(S): Liu, Pei; Sun, Bo; Lu, Xiumei; Qin, Feng; Li, Famei

CORPORATE SOURCE: School of Pharmacy, Shenyang Pharmaceutical University, Shenyang, 110016, Peop. Rep. China SOURCE: Biomedical Chromatography (2007), 21(1), 89-93

CODEN: BICHE2; ISSN: 0269-3879

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB A simple, sensitive, and selective high-performance liquid chromatog. (HPLC) method with UV detection (306 nm) was developed and validated for determination of

tenatoprazole, a novel proton-pump inhibitor, in dog blood plasma.

Tenatoprazole and internal standard (pantoprazole) were extracted into di-Et ether

and separated using an isocratic mobile phase of 10 mM phosphate buffer (pH $4.7)\mbox{-acetonitrile}$ (70:30, volume/volume) on a Diamonsil C18 column (150 + 4.6 mm, 5 $\mu m)$. The retention times for tenatoprazole and internal standard were 7.1 and 12.3 min, resp. No endogenous interferences were observed. This HPLC method was fully validated. The lower limit of quantitation was 20 ng/mL, with a relative standard deviation of < 20%. A linear range of 0.02-5.0 $\mu g/mL$ was established. The interday and intraday precisions were within RSD 13.4-10.1 and 4.6-1.4%, resp. This method developed can be easily applied to the pharmacokinetic study of tenatoprazole in dog plasma after oral administration of an enteric-coated capsule. The plasma concentration of tenatoprazole from 6 dogs showed a mean Cmax of 2.63 $\mu g/mL$ at Tmax of 1.89 h. The bioavailability of tenatoprazole was improved by administration of enteric-coated capsule.

IT 113712-98-4, Tenatoprazole

RL: ANT (Analyte); PKT (Pharmacokinetics); ANST (Analytical study); BIOL (Biological study)

(HPLC determination and pharmacokinetic study of tenatoprazole in dog blood plasma)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 32 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:116062 CAPLUS

DOCUMENT NUMBER: 146:206299

TITLE: Preparation of isotopically substituted benzimidazoles

as proton pump inhibitors

INVENTOR(S): Kohl, Bernhard; Mueller, Bernd; Haag, Dieter; Simon,

Wolfgang-Alexander; Zech, Karl; David, Michael; Von

Richter, Oliver; Huth, Felix

PATENT ASSIGNEE(S): Altana Pharma A.-G., Germany

SOURCE: PCT Int. Appl., 55pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	. O <i>V</i>		D.	ATE	
	WO 2007	 0126	 50		A1	_	2007	0201		WO 2	 006-:	EP64	 666		2	0060	 726
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KN,	KP,
		KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
	MW, MX, MZ				NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,
	SC, SD, SE				SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,
	US, UZ, VC					ZA,	ZM,	ZW									
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	KΕ,	LS,	MW,	${ m MZ}$,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
	KG, KZ, MD				RU,	ΤJ,	TM										
	IN 2008		Α		2008	0307		IN 2	008-1	MN31	7		2	0800	220		
PRIOR	RITY APP	.:						EP 2	005-	1068	68	i	A 2	0050	726		
								WO 2	006-	EP64	666	Ī	W 2	0060	726		
OTHER	COLIBCE	181 .			MAD.	DZT	1/6.	2062	aa								

OTHER SOURCE(S): MARPAT 146:206299

GΙ

$$R^2$$
 R^3
 R^4
 R^4

AB Title compds. represented by the formula I [wherein R1 = H or alkoxy; R2 = alkyl or alkoxy; R3 = alkyl or (alkoxy)alkoxy; R4 = H or alkyl; Z = CH or N; n = 0 or 1; at least one of the hydrogen atoms of R1-R4 or any combination of R1-R4 is replaced by a deuterium atom; and their salts,

solvates hydrates thereof] were prepared as proton pump inhibitors. For example, II (n = 1) was provided in 95% yield by oxidation of II (n = 0) with sodium hypochlorite. I were tested for metabolization in liver microsomes and formation kinetics of pantoprazole M2. Thus, I and their pharmaceutical compns. are useful for the treatment and/or prophylaxis of gastrointestinal disorders.

IT 922731-08-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of isotopically substituted benzimidazoles as proton pump inhibitors)

RN 922731-08-6 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[[4-(methoxy-d3)-3,5-dimethyl-2-pyridinyl]methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 33 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:113232 CAPLUS

DOCUMENT NUMBER: 146:212829

TITLE: Oral compositions containing magnesium salts of proton

pump inhibitors and hydrophilic polymer coatings for

improved solubility

INVENTOR(S): Namburi, Ranga R.; Tallapragada, Ravi Srikanth;

Gokaraju, Subbaraju; Palkhiwala, Burgise F.

PATENT ASSIGNEE(S): Opharma, LLC, USA

SOURCE: U.S. Pat. Appl. Publ., 12pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE		ATION NO.	DATE
US 20070026071	A1 2007		5-191520	
WO 2007016128	A2 2007	0208 WO 2006	5-US28922	20060726
W: AE, AG, AL,	AM, AT, AU,	AZ, BA, BB, BO	G, BR, BW, BY,	BZ, CA, CH,
CN, CO, CR,	CU, CZ, DE,	DK, DM, DZ, EG	C, EE, EG, ES,	FI, GB, GD,
GE, GH, GM,	HN, HR, HU,	ID, IL, IN, IS	G, JP, KE, KG,	KM, KN, KP,
KR, KZ, LA,	LC, LK, LR,	LS, LT, LU, LV	7, LY, MA, MD,	MG, MK, MN,
MW, MX, MZ,	NA, NG, NI,	NO, NZ, OM, PO	G, PH, PL, PT,	RO, RS, RU,
SC, SD, SE,	SG, SK, SL,	SM, SY, TJ, Th	4, TN, TR, TT,	TZ, UA, UG,
US, UZ, VC,	VN, ZA, ZM,	ZW		
RW: AT, BE, BG,	CH, CY, CZ,	DE, DK, EE, ES	G, FI, FR, GB,	GR, HU, IE,
IS, IT, LT,	LU, LV, MC,	NL, PL, PT, RO	O, SE, SI, SK,	TR, BF, BJ,
CF, CG, CI,	CM, GA, GN,	GQ, GW, ML, MI	R, NE, SN, TD,	TG, BW, GH,
GM, KE, LS,	MW, MZ, NA,	SD, SL, SZ, TZ	Z, UG, ZM, ZW,	AM, AZ, BY,
KG, KZ, MD,	RU, TJ, TM			

PRIORITY APPLN. INFO.: US 2005-191520 A 20050728

AB The present invention concerns oral dosage formulations of sparingly to very slightly water soluble proton pump inhibitors, the oral dosage forms so made, and methods of use thereof. The oral dosage form has a core tablet of compressed particles composed of powder particles of a pharmaceutically acceptable material, having coated thereon admixt. of a sparingly to very slightly water soluble magnesium salt of a benzimidazole proton pump inhibitor; and a hydrophilic polymer having a surfactant functionality that increases the water solubility of the magnesium salt of the benzimidazole proton pump inhibitor. The coated core tablet has a pharmaceutically acceptable sub-coating on the core tablet; and a pharmaceutically acceptable enteric coating on the sub-coating. The coated tablet may provide enhanced absorption when administered orally. For example, coated tablets for delayed release contained omeprazole magnesium trihydrate, HPMC, cellulose, croscamellose sodium, and magnesium stearate.

IT 884304-68-1, Tenatoprazole magnesium

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Tenatoprazole magnesium; oral compns. containing magnesium salts of proton pump inhibitors and hydrophilic polymer coatings for improved solubility)

RN 884304-68-1 CAPLUS

●1/2 Mg

ANSWER 34 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN T.3

2007:62311 CAPLUS ACCESSION NUMBER:

146:169323 DOCUMENT NUMBER:

Use of a partially neutralized, anionic (meth)acrylate TITLE:

copolymer as a coating for the production of a

medicament releasing active substance at reduced pH

values

INVENTOR(S): Petereit, Hans-Ulrich; Assmus, Manfred

PATENT ASSIGNEE(S): Roehm G.m.b.H., Germany SOURCE: PCT Int. Appl., 40pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PA:	CENT :	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
		2007 2007				A2 A3		2007 2007			WO 2	006-	EP31	15		2	0060	405
	W: AE, AG, CN, CO, GE, GH, KZ, LC, MZ, NA, SG, SK, VN, YU, RW: AT, BE,			AG, CO, GH, LC, NA, SK,	CR, GM, LK, NG, SL,	AM, CU, HR, LR, NI, SM,	AT, CZ, HU, LS, NO, SY,	AU, DE, ID, LT, NZ,	AZ, DK, IL, LU, OM,	DM, IN, LV, PG,	DZ, IS, LY, PH,	EC, JP, MA, PL,	EE, KE, MD, PT,	EG, KG, MG, RO,	ES, KM, MK, RU,	FI, KN, MN, SC,	GB, KP, MW, SD,	GD, KR, MX, SE,
		RW:	AT, IS, CF, GM,	BE, IT, CG, KE,	BG, LT, CI, LS,	CH, LU, CM, MW,	CY, LV, GA, MZ,	CZ, MC, GN, NA, TM,	NL, GQ, SD,	PL, GW, SL,	PT, ML, SZ,	RO, MR, TZ,	SE, NE,	SI, SN,	SK, TD,	TR, TG,	BF, BW,	BJ, GH,
	DE 102005032806 CA 2609439 KR 2008024200							2007 2007 2008	0118		CA 2 KR 2	006- 008-	2609 7009	439 64		2 2	0050 0060 0080	405 111
PRIOR	ORITY APPLN. INFO.:											005- 006-:				_	0050° 0060	

The invention relates to the use of a partially neutralized, anionic (meth)acrylate copolymer comprising radically polymerized units of 25 to 95 % by weight of C1 to C4 alkyl esters of acrylic or methacrylic acid and 5 to 75 % by weight of (meth)acrylate monomers with an anionic group, at least 4 % of which are neutralized by means of a base, for producing a medicament that is provided with an active substance-containing core and is coated with the partially neutralized, anionic (meth)acrylate copolymer. Said medicament releases at least 30 % of the active substance contained therein in 30 min at a pH at which the active substance is sufficiently soluble and stable and at which the corresponding medicament that is coated with the non-neutralized anionic (meth)acrylate polymer releases less than 10 % of the active substance contained therein. Thus 0.5-0.8 mm theophylline granules were coated in fluid bed with an Eudragit L30 D-55-containing compns. containing various amts. of 1N sodium hydroxide to neutralize the carboxylic groups in the polymer. The coating included (g): Eudragit L30 D-55 794.1; talc 119.1; tri-Et acetate 23.8; water 1456.7; sodium hydroxide was either not added, or added to neutralize 4.4, 15 or 30% of the polymer carboxylic groups. Drug release was tested for the various coated pellets.

113712-98-4, Tenatoprazole ΤТ

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (use of a partially neutralized, anionic (meth)acrylate copolymer as a coating for production of a medicament releasing active substance at reduced pH values)

113712-98-4 CAPLUS RN

3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-CN

pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & N \\ \end{array}$$
 S- CH₂
$$\begin{array}{c|c} N \\ Me \\ \end{array}$$
 Me
$$\begin{array}{c|c} Me \\ \end{array}$$
 OMe

L3 ANSWER 35 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1337905 CAPLUS

DOCUMENT NUMBER: 146:68729

TITLE: Compositions of antiulcerative substituted

benzimidazoles

INVENTOR(S): Reddy, Male Srinivas; Reddy, Pothireddy Venkateswar;

Vanaja, Muppidi

PATENT ASSIGNEE(S): Hetero Drugs Limited, India

SOURCE: PCT Int. Appl., 85pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT 1		KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE			
WO	2006	 1346	 11		A1	_	2006	1221	,	WO 2	 005-	IN20	3		2	0050	 616
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KP,	KR,	KΖ,
	LC, LK, LF		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	
	NG, NI, NO		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	
	SL, SM, SY		SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	
		ZA,	ZM,	ZW													
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙΤ,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ΒJ,	CF,
		CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	$\mathrm{ML}_{m{\prime}}$	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,	GM,
		KΕ,	LS,	MW,	MZ,	NΑ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,	KG,
	KZ, MD, RU			RU,	ΤJ,	TM											

PRIORITY APPLN. INFO.:

WO 2005-IN203 20050616

AB The present invention particularly relates to improved stable pharmaceutical formulations for hygroscopic antiulcerative substituted benzimidazoles, optionally in combination with other active ingredients in the form of pellets, capsules and tablets. For example, stable pharmaceutical formulations of rabeprazole sodium, comprises rabeprazole sodium, heavy calcium carbonate, mannitol, polyvinylpyrrolidone S-630, starch, hydroxypropyl cellulose (low-substituted), sodium stearyl fumarate, hydroxypropyl Me cellulose-15cps and acryl EZE.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oral compns. of antiulcerative substituted benzimidazoles)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 36 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1286270 CAPLUS

DOCUMENT NUMBER: 146:39046

TITLE: Compositions and methods for treating nocturnal acid

breakthrough and other acid related disorders

INVENTOR(S): Phillips, Jeffrey Owen

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 16pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060276500	A1	20061207	US 2006-380177	20060425
PRIORITY APPLN. INFO.:			US 2005-675123P P	20050426
OTHER COHROL (C).	ת ע ח ח ע זע	146.20046		

OTHER SOURCE(S): MARPAT 146:39046

AB In various embodiments, the present invention provides pharmaceutical compns. comprising at least one acid labile proton pump inhibitor and at least one buffering agent. Also provided are methods of treating and/or preventing acid related gastrointestinal disorders by administering to a subject one or more compns. of the invention. In one embodiment, methods are provided for treating and/or preventing nighttime acid breakthrough and/ or nighttime heartburn and related symptoms thereof.

IT 113712-98-4, Tenatoprazole 113712-98-4D, Tenatoprazole,

derivs. and prodrugs

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treatment of nocturnal acid breakthrough and other acid related gastrointestinal disorders using acid labile proton pump inhibitor and buffering agent)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

RN 113712-98-4 CAPLUS

L3 ANSWER 37 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1206787 CAPLUS

DOCUMENT NUMBER: 146:45510

TITLE: Synthesis of tenatoprazole

INVENTOR(S): Dai, Liyan; Wang, Xiaozhong; Chen, Yingqi PATENT ASSIGNEE(S): Zhejiang University, Peop. Rep. China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 10pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1861600	A	20061115	CN 2006-10051971	20060614
PRIORITY APPLN. INFO.:			CN 2006-10051971	20060614

OTHER SOURCE(S): CASREACT 146:45510

AB The title method comprises the steps of: (1) using 2,3,5-trimethyl-4-nitropyridine N-oxide as the raw material, rearranging in the presence of anhydride at 60-120°C and hydrolyzing at 50-70°C to obtain 2-hydroxymethyl-3,5-dimethyl-4-nitropyridine, (2) reacting with chlorinating agent to obtain 2-chloromethyl-3,5-dimethyl-4-nitropyridine, (3) condensing with 2-mercapto-5-methoxyimidazo[4,5-b]pyridine at 40-65°C to obtain 2-(3,5-dimethyl-4-nitropyridine-2-methylthio)-5-methoxyimidazo[4,5-b]pyridine, (4) reacting with sodium methoxide to obtain 2-(3-5-demethyl-4-methoxypyridine-2-methylthio)-5-methoxyimidazo[4,5-b]pyridine, and (5) dissolving 2-(3-5-demethyl-4-methoxypyridine-2-methylthio)-5-methoxyimidazo[4,5-b]pyridine in halohydrocarbon and oxidating at (-25)-(-5)°C with organic peracid as the oxidant to obtain tenatoprazole.

IT 113712-98-4P, Tenatoprazole

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(synthesis of tenatoprazole)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline \\ Me & OMe \\ \end{array}$$

IT 113713-24-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of tenatoprazole)

RN 113713-24-9 CAPLUS

ANSWER 38 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN T.3

ACCESSION NUMBER: 2006:1205203 CAPLUS

145:495653 DOCUMENT NUMBER:

TITLE: Compositions and methods for inhibiting gastric acid

secretion comprising carboxylic acids and proton pump

inhibitors

INVENTOR(S): Kostadinov, Aleksey; David, Ayelet; Glozman, Sabina

PATENT ASSIGNEE(S): Vecta, Ltd., Israel SOURCE: PCT Int. Appl., 30pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: DATENT NO

PA'	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	. O <i>l</i> .		D.	ATE	
WO	2006	1205	00		A1		2006	1116		WO 2	005-	IB22	23		2	0050	728
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	ВG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KP,	KR,	KΖ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,
		NG,	NI,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
		SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,
		ZA,	ZM,	ZW													
	RW: AT, BE, BO				CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
	IS, IT, LT			LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
	CF, CG, CI			CI,	CM,	GA,	GN,	GQ,	GW,	${ m ML}$,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	KΕ,	LS,	MW,	MZ,	NΑ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	$^{\mathrm{TM}}$										
US	2006	0257	467		A1		2006	1116		US 2	005-	1916	88		2	0050	727
AU	2005	3316	89		A1		2006	1116		AU 2	005-	3316	89		2	0050	728
	2607						2006	_		_						0050	
EP	1879															0050	
	R:						CZ,										IE,
	IS, IT, LI				•			•			•						
	IN 2007KN03642															00709	
	KR 2008005566						2008	0114								0071	
IORIT	RITY APPLN. INFO.:										005- 005-					0050! 0050'	
													-			•	

The present invention is related to novel oral compns. comprising an AΒ irreversible gastric H+/K+-ATPase proton pump inhibitor (PPI) as a gastric acid secretion inhibitor and one or more small carboxylic acid mols. as parietal cell activators in the gastric lumen. Unexpectedly, the compns. of the present invention are capable of enhancing the anti-acid activity of PPI in the stomach. The present invention further relates to a method of using such compns. to reduce gastric acid secretion in a mammal. Thus, succinic acid (ScA, 15 mg/mL) was capable of enhancing the inhibitory effect of pantoprazole (10 mg/mL) on gastric acid secretion in an exptl. model of conscious pylorus-ligated rats. Also, ScA was granulated with a combination of Polyox WSR N60 and HPMC K100M, the granules were combined with lactose and HPMC and compressed into minitabs with the ability of fast swelling into size big enough to enable gastric retention. The polymeric matrix controls the ScA release into the stomach. The ScA minitabs were then mixed with enteric-coated PPI pellets and filled into hard gelatin capsules. Following disintegration of the capsules gelatinic body, the PPI pellets pass though the stomach to the duodenum, where the enteric coat will dissolve. The succinic acid minitabs remain in the stomach and slowly release their content in a controlled release gastro retentive manner.

113712-98-4, Tenatoprazole ΤТ

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(compns. comprising proton pump inhibitors and carboxylic acid for inhibiting gastric acid secretion)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

1

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 39 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1202084 CAPLUS

DOCUMENT NUMBER: 146:13094

TITLE: Proton pump inhibitor liquid medicament, its

preparation and application in manufacture of

injection

INVENTOR(S): Zhou, Huaying PATENT ASSIGNEE(S): Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 24pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PRIO:	CN 1857200 RITY APPLN. INFO.:	A	20061108	CN 2006-10087335 CN 2006-10087335	20060608 20060608
AB	The medicament cont	ains (a) a therapeu	tically ED of drugs of	proton pump
	inhibitors showed b	y formu	la (I), wher	ein X, Y, R1, R2, R3, R	4 and R5 are
	defined by patent;	and (b)	therapeutic	ally acceptable medical	solvent that
	is comprised of sho	rt-chai	n alcs. such	as ethanol, 1,2-propyl	ene alc.,
	glycerol, and isopr	opanol.	Said drugs	of proton pump inhibit	ors are
	selected from omepr	azole,	esomeprazole	, lansoprazole, pantopr	azole,
	rabeprazole, timopr	azole,	picoprazole,	leminoprazole, tenatop	razole, and
	salts, enantiomers,	salts	of enantiome	r, isomers, salts of is	omer and
					_

solvates thereof. The medicament also contains at least one of

flavoring agent, and water for medicine. The preparation process consists of (1) dissolving drugs of proton pump inhibitors with medical solvent while stirring; (2) adding addnl. medical adjuvant while stirring to dissolve;

(3) adding medical solvent to full dose, and homogenizing; and (4) filtering, subpackaging, and sealing to obtain the product.

therapeutically acceptable adjuvant selected from acid-base regulator, metal complexing agent, bacteriostatic agent, analgesic, surfactant,

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (proton pump inhibitor liquid medicament, its preparation and application in manufacture of injection)

RN 113712-98-4 CAPLUS

L3 ANSWER 40 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1177356 CAPLUS

DOCUMENT NUMBER: 145:465781

TITLE: Proton pump inhibitors for the treatment of sleep

disturbance due to silent gastroesophageal reflux

INVENTOR(S): Fernstroem, Paula; Hasselgren, Goeran

PATENT ASSIGNEE(S): Astrazeneca AB, Swed. SOURCE: PCT Int. Appl., 22pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
	WO	2006	 1185	 34		A1		2006	1109		WO 2	006-	SE53	5		2	 0060	503
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,	KR,
			KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
			MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
			SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
			VN,	YU,	ZA,	ZM,	ZW											
		RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
			GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ΤJ,	TM										
	EP	1879	577			A1		2008	0123		EP 2	006-	7333	90		2	0060	503
		R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
PRIO	RITS	Z APP	LN.	INFO	.:						SE 2	005-	1041			A 2	0050	504
											US 2	005-	6809.	32P		P 2	0050	512
											WO 2	006-	SE53	5	1	w 2	0060	503
									_									

AB The invention discloses the use of proton pump inhibitors, e.g. omeprazole, lansoprazole, pantoprazole, rabeprazole, esomeprazole, tenatoprazole, laprazole, leminoprazole, and an omeprazole derivative, in the treatment of sleep disturbance due to silent gastroesophageal reflux.

IT 113712-98-4, Tenatoprazole 113712-98-4D, Tenatoprazole,

enantiomers and salts

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(proton pump inhibitors for treatment of sleep disturbance due to silent gastroesophageal reflux)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline \\ Me & OMe \\ \end{array}$$

7

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 41 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1157822 CAPLUS

DOCUMENT NUMBER: 145:460582

TITLE: Veterinary pharmaceutical compositions comprising a

proton pump inhibitor and a buffering agent and

methods of using same

INVENTOR(S): Phillips, Jeffrey

PATENT ASSIGNEE(S): The Curators of the University of Missouri, USA

SOURCE: PCT Int. Appl., 34pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIN	D	DATE			APPL	ICAT		DATE					
	WO 2006116556						2006		,	WO 2	 006-		20060425				
WO	WO 2006116556				АЗ	A3 20070816											
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	KR,
		KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,
		VN,	YU,	ZA,	ZM,	ZW											
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AP,	EA,	EP,	ΟA						
DIES ADDIA TARO											005	C7 F 1	000		_ ^	0050	100

PRIORITY APPLN. INFO.: US 2005-675122P P 20050426 OTHER SOURCE(S): MARPAT 145:460582

AB Pharmaceutical compns. comprising an acid labile proton pump inhibitor, a buffering agent, and at least one addnl. pharmaceutically acceptable excipient. Also provided are methods for manufacture of such compns., and to use of such compns. in treating and preventing diseases and/or disorders. Several pellets were prepared, each comprising non-enteric coated omeprazole, sodium bicarbonate, pregelatinized starch, sucrose and flavoring agent. These ingredients were dry blended and compressed in

Parr pellet press. The pellets were then administered to a horse and its serum level was measured.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (veterinary pharmaceutical compns. comprising proton pump inhibitor and buffering agent and methods of using same)

RN 113712-98-4 CAPLUS

L3 ANSWER 42 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1156275 CAPLUS

DOCUMENT NUMBER: 145:460579

TITLE: Pharmaceutical compositions comprising substituted

benzimidazole as proton pump inhibitors and buffers

and vitamin B12 and ferrous salts

INVENTOR(S): Phillips, Jeffrey

PATENT ASSIGNEE(S): The Curators of the University of Missouri, USA

SOURCE: PCT Int. Appl., 35pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIN	D	DATE			APPL	ICAT	ION I	NO.		D.	ATE		
	WO 2006116582 WO 2006116582				A2 20061102 A3 20070726				 WO 2	006-	US15	982		20060425			
	W:	CN, GE, KZ, MZ, SG,	CO, GH, LC, NA, SK,	CR, GM, LK, NG, SL,	CU, HR, LR, NI, SM,	CZ, HU, LS, NO, SY,	AU, DE, ID, LT, NZ, TJ,	DK, IL, LU, OM,	DM, IN, LV, PG,	DZ, IS, LY, PH,	EC, JP, MA, PL,	EE, KE, MD, PT,	EG, KG, MG, RO,	ES, KM, MK, RU,	FI, KN, MN, SC,	GB, KP, MW, SD,	GD, KR, MX, SE,
	RW:	AT, IS, CF, GM,	BE, IT, CG, KE,	LT, CI, LS,	CH, LU, CM, MW,	CY, LV, GA, MZ,	CZ, MC, GN, NA,	NL, GQ, SD,	PL, GW, SL,	PT, ML, SZ,	RO, MR, TZ,	SE, NE,	SI, SN,	SK, TD,	TR, TG,	BF, BW,	BJ, GH,
		•	KZ,	MD,	RU,	ΤJ,	TM,	•	•	•					_ ^	0050	

PRIORITY APPLN. INFO.:

US 2005-675133P P 20050426

OTHER SOURCE(S): MARPAT 145:460579

AB The present invention relates to, inter alia, pharmaceutical compns. comprising one or more of an acid labile proton pump inhibitor, a buffering agent, and vitamin B12; to methods for manufacture of such compns., and to use of such compns. in treating and preventing diseases and/or disorders. For example, tablets contained omeprazole, vitamin B12, ferrous sulfate, sodium bicarbonate, calcium carbonate, sodium carbonate and magnesium hydroxide.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. comprising substituted benzimidazole as proton pump inhibitors and buffers and vitamin B12 and ferrous salts)

RN 113712-98-4 CAPLUS

L3 ANSWER 43 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:982400 CAPLUS

DOCUMENT NUMBER: 145:342507

TITLE: Stable tablet dosage forms of proton pump inhibitors INVENTOR(S): Namburi, Ranga R.; Karri, Rama Prasad; Tallapragada,

Ravi Srikanth; Palkhiwala, Burgise F.

PATENT ASSIGNEE(S): Qpharma, LLC, USA

SOURCE: U.S. Pat. Appl. Publ., 12pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

Ţ		2006						DAIL									ATE	
		US 20060210637							US 2005-82610							0050		
<u> </u>	NO	2006	1017	94		A2		2006	0928		WO 2	006-	US88.	55		2	0060	314
Ţ.	ΜO	2006	1017	94		A3		2007	0104									
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	KR,
			KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
			MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
			SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
			VN,	YU,	ZA,	ZM,	ZW											
		RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
			GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ТJ,	TM										
Ţ	JS	2008	0057	125		A1		2008	0306		US 2	007-	8495	05		2	0070	904
PRIOR	ITY	APP:	LN.	INFO	.:						US 2	005-	8261	0		A 2	0050	317
AB :	Thi	s in	vent.	ion :	rela	tes ·	to a	. meti	hod (of m	akin	g or	al f	ormu	lati	ons	of	
I	ora	ctic.	ally	wat	er i	nsol	., 0	r ve	ry si	ligh	tly '	wate:	r so	lubl	e pr	oton	pum	<u> </u>
:	inh	ibit	ors,	the	ora	l do	sage	for	ms so	o ma	de,	and 1	meth	ods	of u	se ti	here	of.
-	The	ora.	l do	sage	for	m ha	s a	core	tab.	let	of c	ompr	esse	d pa	rtic	les	comp	osed

- AB This invention relates to a method of making oral formulations of practically water insol., or very slightly water soluble proton pump inhibitors, the oral dosage forms so made, and methods of use thereof. The oral dosage form has a core tablet of compressed particles composed of powder particles of a pharmaceutically acceptable material, having coated thereon admixt. of an amorphous, salt form of a benzimidazole proton pump inhibitor produced in-situ; and a pharmaceutically acceptable, water-soluble, hydrophilic polymer having a surfactant functionality. The coated core tablet has a pharmaceutically acceptable sub-coating on the core tablet; and a pharmaceutically acceptable enteric coating on the sub-coating. The coated tablet may provide enhanced absorption when administered orally. A core tablet containing omeprazole 20.0 mg was coated with Opadry 03K19299 5.517, and disodium hydrogen phosphate 0.184 to obtain a delayed-release tablet.
- IT 113712-98-4, Tenatoprazole
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (stable tablet dosage forms of proton pump inhibitors)
- RN 113712-98-4 CAPLUS
- CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

ANSWER 44 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN T.3

2006:952866 CAPLUS ACCESSION NUMBER:

145:321808 DOCUMENT NUMBER:

TITLE: Pharmaceutical formulations for inhibiting acid

secretion

INVENTOR(S): Hall, Warren; Olmstead, Kay; Weston, Laura

Santarus, Inc., USA PATENT ASSIGNEE(S):

U.S. Pat. Appl. Publ., 56pp., Cont.-in-part of U.S. SOURCE:

Ser. No. 893,203.

CODEN: USXXCO

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060204585	A1	20060914	US 2006-338608	20060124
US 20050037070	A1	20050217	US 2004-893203	20040716
PRIORITY APPLN. INFO.:			US 2003-488321P	P 20030718
			US 2004-893203	A2 20040716

In one general aspect of the present invention, pharmaceutical AΒ formulations comprising both a proton pump inhibitor microencapsulated or dry coated with a material that enhances the shelf-life of the pharmaceutical composition and one or more antacids are described. In another general aspect of the present invention, pharmaceutical formulations comprising both a proton pump inhibitor microencapsulated or dry coated with a taste-masking material and one or more antacid are described. Thus, dry granules contained omeprazole 10, sodium bicarbonate 85, Klucel 5, and Mg stearate 0.3 mg.

ΙT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical formulations for inhibiting acid secretion)

113712-98-4 CAPLUS RN

L3 ANSWER 45 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:883781 CAPLUS

DOCUMENT NUMBER: 146:429014

TITLE: Comparison of three methods for quantitative

determination of tenatoprazole

AUTHOR(S): Liu, Pei; Sun, Bo; Lu, Xiu-mei; Li, Fa-mei

CORPORATE SOURCE: Shenyang Pharmaceutical University, Shenyang, 110016,

Peop. Rep. China

SOURCE: Zhongguo Xinyao Zazhi (2006), 15(1), 49-52

CODEN: ZXZHA6; ISSN: 1003-3734

PUBLISHER: Zhongquo Xinyao Zazhi Youxian Gongsi

DOCUMENT TYPE: Journal LANGUAGE: Chinese

AB Argentometric method, UV spectrophotometry and HPLC method were used to quantify tenatoprazole resp. Results showed that the argentometric method showed an average recovery rate of 99.9% with RSD of 0.13% (n = 5) and the precision of 0.09% (n = 5). The calibrated linear curve of tenatoprazole was in the range of $5.020-50.20~\mu g/mL$ (r = 0.9997) by HPLC, which had the average recovery rate of 99.5-100.0% and the precision of 0.20% (n = 6). The UV anal. provided a calibrated linear curve within $2.0-12~\mu g/mL$ (r = 0.9999) with average recovery of 99.4-100.3% and the precision of 0.81% (n = 5). In conclusion, the accurate argentometric method did not need reference substance. The rapid UV spectrophotometry was a convenient tool, and the specific HPLC method offered an analytic way in the quantification of the impurities in tenatoprazole.

IT 113712-98-4, Tenatoprazole

RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(comparison of tenatoprazole determination methods)

RN 113712-98-4 CAPLUS

L3 ANSWER 46 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:883780 CAPLUS

DOCUMENT NUMBER: 146:521403

TITLE: Structural elucidation of proton pump inhibitor

tenatoprazole by NMR

AUTHOR(S): Liu, Li-jun; Wang, Lin; Li, Lu; Miao, Zhen-chun

CORPORATE SOURCE: Institute of Pharmacology and Toxicology, Academy of

Military Medical Sciences, Beijing, 100850, Peop. Rep.

China

SOURCE: Zhongquo Xinyao Zazhi (2006), 15(1), 47-49

CODEN: ZXZHA6; ISSN: 1003-3734

PUBLISHER: Zhongguo Xinyao Zazhi Youxian Gongsi

DOCUMENT TYPE: Journal LANGUAGE: Chinese

AB The paper aimed to determine the structure of the proton pump inhibitor (H+/K+-ATPase inhibitor) tenatoprazole by 1H- and 13C-NMR. 1D-NOESY (one-dimensional nuclear Overhauser effect spectroscopy) and 2D-NMR techniques including 1H and 13C COSY (correlated spectroscopy) were used to elucidate the skeleton structure of tenatoprazole. Results showed that the proton and carbon assignments and connections with the signals in the NMR spectrum of this compound were successfully completed. In conclusion, the chemical structure of tenatoprazole was confirmed.

IT 113712-98-4, Tenatoprazole

RL: PRP (Properties)

(structural elucidation of proton pump inhibitor tenatoprazole by NMR)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

L3 ANSWER 47 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:821280 CAPLUS

DOCUMENT NUMBER: 145:241746

TITLE: Medicine composition containing superoxide dismutase

for treating peptic ulcer

INVENTOR(S): Kong, Qingzhong; Gao, Bifeng; Liu, Enxiang; Zhang,

Jie; Yu, Jianjiang; Su, Hongqing; Zhang, Hongjun Shandong Lanjin Biotech Co., Ltd., Peop. Rep. China

Faming Zhuanli Shenging Gongkai Shuomingshu, 18pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

SOURCE:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	CN 1814283	 А	20060809	CN 2005-10200786	20051209
PRIO	RITY APPLN. INFO.:			CN 2005-10200786	20051209
AB	The title compositi	on comp	rises oxygen	free radical scavenger	(superoxide
	dismutase), or comb	ination	of oxygen fr	ree radical scavenger a	nd an
	effective amount of	Helicol	bacter pylor:	i inhibitor and/or an e	ffective amo

AB The title composition comprises oxygen free radical scavenger (superoxide dismutase), or combination of oxygen free radical scavenger and an effective amount of Helicobacter pylori inhibitor and/or an effective amount of gastric acid secretion inhibitor. The superoxide dismutase (SOD) includes Mn-SOD, CuZn-SOD, and EC-SOD, and the gastric acid secretion inhibitor includes histamine receptor antagonist, proton pump inhibitor, and/or antiacid, while the Helicobacter pylori inhibitor can be penicillin, erythromycin, amoxicillin, clarithromycin, etc. The inventive composition can be prepared into forms of granule, effervescent, tablet, capsule,

syrup, injection, suspension for injection, suppository, or sustained-release agent. The medicine composition can be administered orally or non-orally for preventing and treating gastric ulcer, duodenal ulcer, Zollinger-Ellison syndrome, reflux esophagitis, gastritis, and duodenitis.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(medicine composition containing superoxide dismutase for treating peptic ulcer)

RN 113712-98-4 CAPLUS

L3 ANSWER 48 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:815215 CAPLUS

DOCUMENT NUMBER: 145:256130

TITLE: Pharmaceutical composition for preventing and treating

peptic ulcer

INVENTOR(S): Sun, Juan; Sun, Zhonghou; Tian, Shaolan

PATENT ASSIGNEE(S): Jinan Kangquan Medical Science and Technology Co.,

Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 15pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1814291	A	20060809	CN 2005-10200783	20051209
PRIORITY APPLN. INFO.:			CN 2005-10200783	20051209

AB The title composition comprises melatonin or L-tryptophane, and therapeutically effective amts. of an agent with inhibitory effect on Helicobacter pylori (Hp) and a gastric acid secretion inhibitor. The Hp-inhibitory agent can be selected from one or more of penicillin, ampicillin, amoxicillin, metronidazole, furazolidone, erythromycin, clarithromycin and its analogs, gentamicin, tetracycline, etc. The gastric acid secretion inhibitor is selected from histamine receptor antagonist, proton pump inhibitor, and/or antiacids. The composition can be manufactured into granule, effervescent, tablet,

capsule, syrup, injection, injection suspension, suppository, or sustained— or controlled—release preparation. The composition has the effects in

scavenging oxyradical, inhibiting the growth of Hp, and inhibiting the secretion of gastric acid, and can be used for preventing and treating gastric and duodenal ulcer.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical composition for preventing and treating peptic ulcer)

RN 113712-98-4 CAPLUS

L3 ANSWER 49 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:815212 CAPLUS

DOCUMENT NUMBER: 145:256129

TITLE: Pharmaceutical composition for treating peptic ulcer

INVENTOR(S): Sun, Juan; Sun, Zhonghou; Tian, Shaolan

PATENT ASSIGNEE(S): Jinan Kangquan Medical Science and Technology Co.,

Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 14pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1814289	А	20060809	CN 2005-10200782	20051209
CN 101138563	A	20080312	CN 2007-10201149	20051209
PRIORITY APPLN. INFO.:			CN 2005-10200782	3 20051209

AB The title composition comprises melatonin or L-tryptophan, and therapeutically effective amts. of an agent with inhibitory effect on Helicobacter pylori (Hp) or a gastric acid secretion inhibitor. The Hp-inhibitory agent can be selected from one or more of penicillin, ampicillin, amoxicillin, metronidazole, furazolidone, erythromycin, clarithromycin and its analogs, gentamicin, tetracycline, etc. The gastric acid secretion inhibitor can be selected from one or more of cimetidine, lafutidine, famotidine, roxatidine, lansoprazole, rabeprazole, tenatoprazole, pantoprazole, esomeprazole, leminoprazole, dosmalfate, sofalcone, aluminum hydroxide, magnesium hydroxide, sodium bicarbonate, calcium carbonate, etc. The composition can be manufactured into granule, effervescent tablet, tablet, capsule,

syrup, injection, injection suspension, suppository, or sustained— or controlled—release preparation. The composition has the effects in scavenging oxyradical, inhibiting the growth of Hp, and inhibiting the secretion of gastric acid.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical composition for treating peptic ulcer)

RN 113712-98-4 CAPLUS

L3 ANSWER 50 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:792952 CAPLUS

DOCUMENT NUMBER: 145:202930

TITLE: Use of 5-HT4 agonists for the treatment of delayed

gastric emptying

INVENTOR(S): Earnest, David Lewis; Rojavin, Mikhail; Tougas,

Gervais

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

SOURCE: PCT Int. Appl., 13pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

						KIN	D	DATE				LICAT				D.	ATE	
		2006				A2	_	2006	0810	,		 2006-				2	 0060	127
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,
												, JP,						
			KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY	, MA,	MD,	MG,	MK,	MN,	MW.	MX,
				•								, PL,		,		•		•
												, TT,						
				•	•	ZM,		ŕ	,	,		,	·	·	•	,	ŕ	,
		RW:	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	, ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT	, RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML	, MR,	NE,	SN,	TD,	TG,	BW,	GH,
			GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KΖ,	MD,	RU,	ΤJ,	TM										
	AU	2006	2112	05		A1		2006	0810		AU 2	2006-	2112	05		2	0060	127
	CA	2593	854			A1		2006	0810	1	CA 2	2006-	2593	854		2	0060	127
	ΕP	1853	256			A2		2007	1114		EP 2	2006-	7196	78		2	0060	127
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	, ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL	, PT,	RO,	SE,	SI,	SK,	TR,	AL,
			BA,	HR,	MK,	YU												
	ΙN	2007	DN 0 4	665		A		2007	0817		IN 2	2007-	DN46	65		2	0070	618
		2007						2007	0906]	MX 2	2007-	9136			2	0070	727
								2007	1106		KR 2	2007-	7176	05		2	0070	730
PRIOR	IT	APP:	LN.	INFO	.:						US 2	2005-	6484	79P		P 2	0050	131
										,	WO 2	2006-	JS29.	27	1	w 2	0060	127
7 D	m1			1					1 6					C 1	7	1		

AB The invention discloses a method for the treatment of delayed gastric emptying in a patient in need of such treatment, which comprises administering an effective amount of a 5-HT4 agonist, e.g. tegaserod or a salt or hydrate thereof, to the patient. The delayed gastric emptying may be e.g. proton pump inhibitor-induced.

IT 113712-98-4, Tenatoprazole 113712-98-4D, Tenatoprazole,
 salts 705968-86-1, (S)-Tenatoprazole 705968-86-1D,
 (S)-Tenatoprazole, salts 705969-00-2 705969-00-2D,
 salts

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (5-HT4 agonists for treatment of delayed gastric emptying)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L3 ANSWER 51 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:731954 CAPLUS

DOCUMENT NUMBER: 146:74300

TITLE: The opportunities and benefits of extended acid

suppression

AUTHOR(S): Scarpignato, C.; Pelosini, I. CORPORATE SOURCE: University of Parma, Parma, Italy

SOURCE: Alimentary Pharmacology and Therapeutics (2006),

23(Suppl. 2), 23-34

CODEN: APTHEN; ISSN: 0269-2813

PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review. Acid suppression therapy with proton pump inhibitors is associated with well-established benefits in the management of gastro-oesophageal reflux (GERD) and other acid-related disorders. However, a number of issues still remain unsettled. Despite their clin. efficacy, when given once daily, currently available proton pump inhibitors may not adequately control intragastric acidity during the night in a significant proportion of both healthy subjects and GERD patients, in whom symptom relief remains suboptimal. Although some novel proton pump inhibitors have been synthesized, only few reached clin. testing. Amongst them, tenatoprazole represents a true advance displaying a long half-life (five to seven times longer than that of currently available drugs) and extended acid suppression covering both day and night. All the available clin. studies suggest both pharmacokinetic and pharmacodynamic advantages of tenatoprazole over esomeprazole. As this last compound provides - amongst the members of the class - the most effective control of intragastric $p\bar{H}$ whatever the parameter considered, it is conceivable that tenatoprazole could similarly be better than the other existing proton pump inhibitors. Tenatoprazole appears to be a promising proton pump inhibitor for the treatment of acid-related diseases, where it has the potential to address unmet clin. needs.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (tenatoprazole has longer half-life and extended acid suppress

(tenatoprazole has longer half-life and extended acid suppression covering both day and night and has both pharmacokinetic and pharmacodynamic advantages over esomeprazole in patient with gastro-oesophageal reflux)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT:

100 THERE ARE 100 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 52 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:731951 CAPLUS

DOCUMENT NUMBER: 146:54338

TITLE: The clinical pharmacology of proton pump inhibitors

AUTHOR(S): Sachs, G.; Shin, J. M.; Howden, C. W.

CORPORATE SOURCE: Department of Physiology and Medicine, David Geffen

School of Medicine, University of California at Los

Angeles, Los Angeles, CA, USA

SOURCE: Alimentary Pharmacology and Therapeutics (2006),

23 (Suppl. 2), 2-8

CODEN: APTHEN; ISSN: 0269-2813

PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AΒ A review. Proton pump inhibitors inhibit the gastric H+/K+-ATPase via covalent binding to cysteine residues of the proton pump. All proton pump inhibitors must undergo acid accumulation in the parietal cell through protonation, followed by activation mediated by a second protonation at the active secretory canaliculus of the parietal cell. The relative ease with which these steps occur with different proton pump inhibitors underlies differences in their rates of activation, which in turn influence the location of covalent binding and the stability of inhibition. Slow activation is associated with binding to a cysteine residue involved in proton transport that is located deep in the membrane. However, this is inaccessible to the endogenous reducing agents responsible for restoring H+/K+-ATPase activity, favoring a longer duration of gastric acid inhibition. Pantoprazole and tenatoprazole, a novel proton pump inhibitor which has an imidazopyridine ring in place of the benzimidazole moiety found in other proton pump inhibitors, are activated more slowly than other proton pump inhibitors but their inhibition is resistant to reversal. In addition, tenatoprazole has a greatly extended plasma half-life in comparison with all other proton pump inhibitors. The chemical and pharmacol. characteristics of tenatoprazole give it theor. advantages over benzimidazole-based proton pump inhibitors that should translate into improved acid control, particularly during the night.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pantoprazole and tenatoprazole show nonreversible inhibition and are activated more slowly than benzimidazole-based proton pump inhibitors and tenatoprazole might improve acid control due to its extended plasma half-life)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S-CH_2 \\ \hline \\ Me & OMe \\ \end{array}$$

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 53 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN T.3

2006:722185 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 145:240785

Helicobacter pylori therapy: what is coming? TITLE: AUTHOR(S): Zullo, Angelo; Hassan, Cesare; Eramo, Annarita;

Morini, Sergio

CORPORATE SOURCE: Ospedale Nuovo Regina Margherita Gastroenterologia ed

Endoscopia Digestiva, Rome, 3000153, Italy

SOURCE: Expert Opinion on Therapeutic Patents (2006), 16(8),

1107-1112

CODEN: EOTPEG; ISSN: 1354-3776

PUBLISHER: Informa Healthcare DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AΒ A review. Helicobacter pylori infection is a widespread disease causing significant morbidity and mortality, with a relevant economic impact. To cure such an infection, the use of a 7-day triple therapy (a proton pump inhibitor together with two antibiotics) is suggested in those areas in which clarithromycin resistance rate is < 20%, whereas a 7-day quadruple therapy or a 14-day triple therapy should be used where clarithromycin resistance is higher. However, no existing therapies achieve bacterial eradication in all treated patients, the eradication rate can actually reach values as low as 70-80%. Therefore, new drugs are vital within this field. Surprisingly, very few patents have been claimed in the last three years. Quinolone derivs. probably remain the most investigated drugs, gemifloxacin being proposed most recently. New pleuromutilin derivs. (I-valnemulin) showed a very powerful bactericidal activity against H. pylori isolates, but in vivo data are still lacking. A novel proton pump inhibitor, the (-)-enantiomer of tenatoprazole, with reduced nocturnal acid breakthrough values has been claimed. This compound might improve activity of the antibiotic dose administered at bedtime.

705968-86-1, (-)-Tenatoprazole ΤТ

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Helicobacter pylori infection therapy)

RN 705968-86-1 CAPLUS

3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-methoxy-3,5-dimethyl-3,5-dimCN pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 53 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L3 ANSWER 54 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:698905 CAPLUS

DOCUMENT NUMBER: 145:327747

TITLE: A clinical drug library screen identifies astemizole

as an antimalarial agent

AUTHOR(S): Chong, Curtis R.; Chen, Xiaochun; Shi, Lirong; Liu,

Jun O.; Sullivan, David J., Jr.

CORPORATE SOURCE: Department of Pharmacology and Molecular Sciences, The

Johns Hopkins University School of Medicine,

Baltimore, MD, 21205, USA

SOURCE: Nature Chemical Biology (2006), 2(8), 415-416

CODEN: NCBABT; ISSN: 1552-4450

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal LANGUAGE: English

AB The high cost and protracted time line of new drug discovery are major roadblocks to creating therapies for neglected diseases. To accelerate drug discovery the authors created a library of 2687 existing drugs and screened for inhibitors of the human malaria parasite Plasmodium falciparum. The antihistamine astemizole and its principal human metabolite are promising new inhibitors of chloroquine-sensitive and multidrug-resistant parasites, and they show efficacy in two mouse models of malaria.

IT 113712-98-4, T Enatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(clin. drug library screen identifies astemizole as an antimalarial agent)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & N \\ \end{array}$$
 S - CH₂ N Me Me OMe

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 55 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

KIND

ACCESSION NUMBER: 2006:671479 CAPLUS

DOCUMENT NUMBER: 145:110460

TITLE: Tenatoprazole medical formulation and its preparation

INVENTOR(S): Gao, Yuan; Yu, Weimin; Chen, Zhongyi

PATENT ASSIGNEE(S): Xinyi Pharmaceutical Plant, Peop. Rep. China

DATE

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 22 pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

CN 17958	56	A	20060705	CN 2004-100	93447	2004122	23
PRIORITY APPL	N. INFO.:			CN 2004-100	93447	2004122	23
AB The form	ulation cons	sists of	f core 10-70	, medicine 3	-35, isolat	ing laye	er
1-40, an	d enteric la	ayer 5-4	45 wt%. The	core compri	ses tenatop:	razole,	and
one or m	ore medical	adjuvar	nt. The iso	lating layer	comprises	polymer	
material	selected fr	om hydi	roxypropyl M	e cellulose,	polyvinylp	yrrolido	one c
1 1		_	1 6111 61	, ,	1.1	1 1 1 2 2 1	

APPLICATION NO.

DATE

1-40, and enteric layer 5-45 wt%. The core comprises tenatoprazole, and one or more medical adjuvant. The isolating layer comprises polymer material selected from hydroxypropyl Me cellulose, polyvinylpyrrolidone or hydroxypropyl cellulose, and filler fine powder of medical solid excipient selected from talc powder and silicon oxide. The isolating layer also contains medical non-reducing sugar 0-10 wt%, and light barrier substance. The enteric polymer is acrylic resin, and the plasticizing agent is tri-Et citrate. The outer layer material is selected from antistatic component, wax or polymeric material. The polymeric material is selected from hydroxypropyl Me cellulose or polyvinylpyrrolidone. The preparation process consists of preparing core, encapsulating isolating layer, and encapsulating enteric layer.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tenatoprazole medical formulation and its preparation)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & N \\ \end{array}$$

$$\begin{array}{c|c} S - CH_2 & N \\ \end{array}$$

$$\begin{array}{c|c} Me & Me \\ \end{array}$$

$$\begin{array}{c|c} O \\ OMe \\ \end{array}$$

L3 ANSWER 56 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:630739 CAPLUS

DOCUMENT NUMBER: 145:90005

TITLE: Compositions comprising amorphous benzimidazole

compounds

INVENTOR(S): Bhushan, Indu; Vermani, Kavita; Kodipyaka, Ravinder;

Mehta, Pavak; Mohan, Mailatur Sivaraman

PATENT ASSIGNEE(S): Dr. Reddy's Laboratories Ltd., India; Dr. Reddy's

Laboratories, Inc.

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

E	PAI	ENT I	ΝΟ.			KIN)	DATE		-	APPL:	ICAT	ION I	ΝΟ.		D.	ATE	
		2006								,	WO 2	005-	US46	393		2	0051	220
•		W:							AZ,	RΔ	BB	BG	BB	RM	BY	B7.	$C\Delta$	СН
		VV •							DK,									
																,		
			•	•	•	•	•	•	IL,	•	•	•	•	•	•	•	•	•
									LU,							,		
			${ m MZ}$,	NΑ,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
			SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,
			VN,	YU,	ZA,	ZM,	ZW											
		RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
			GM,	ΚE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ΤJ,	TM										
	CA	2591	983			A1		2006	0629		CA 2	005-	2591	983		2	0051	220
Е						A2		2007	0905		EP 2	005-	8550.	20		2	0051	220
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	IT.	LI.	LT.	LU,	LV.	MC,	NL.	PL,	PT,	RO,	SE,	SI,	SK,	TR	
7	ΓN	20070		•					0907								0070	713
	RIORITY APPLN. INFO.:							_ , ,			IN 2							
11/101/1	CIORIII APPLIN. INCO										WO 2			-			0051	
											VV 2	005-	0070		1	N _		<u> </u>

- AB The present invention relates to the processes for the preparation of pharmaceutical compns. comprising the amorphous form of substituted benzimidazoles or their pharmaceutically acceptable salts, solvates, enantiomers or mixts. thereof, methods of use and treatment of different disease conditions using these compns. For example, esomeprazole magnesium (amorphous) 40 mg was dissolved in methanol, then mannitol 37 mg and meglumine 3 mg were dispersed in the solution. The resulting dispersion was spray dried.
- IT 113712-98-4, Tenatoprazole
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. comprising amorphous benzimidazole compds.)
- RN 113712-98-4 CAPLUS
- CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

ANSWER 57 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN T.3

2006:605733 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 145:110276

Helicobacter pylori inhibitor/gastric acid secretion TITLE:

inhibitor combination for treating peptic ulcer

INVENTOR(S): Sun, Juan; Sun, Zhonghou; Liu, Enxiang; Zhang, Jie;

Su, Hongqing; Yu, Jianjiang; Zhang, Hongjun

PATENT ASSIGNEE(S): Jinan Kangguan Pharmaceutical Science and Technology

Co., Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 15 pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1785429	A	20060614	CN 2005-10200680	20051109
PRIORITY APPLN. INFO.:			CN 2005-10200680	20051109

AB The title medical composition is composed of Helicobacter pylori inhibitor, gastric acid secretion inhibitor, and excipients. The H. pylori inhibitor is penicillin, ampicillin, amoxicillin, erythromycin, etc. The gastric acid secretion inhibitor is a histamine receptor antagonist, such as cimetidine, ranitidine, lafutidine, famotidine, etc., a H+/K+-ATPase inhibitor, e.g., rabeprazole, tenatoprazole, omeprazole, lansoprazole, etc., and an antacid agent, such as Al(OH)3, Mg(OH)2, NaHCO3, etc. The medical composition may be prepared into powder, granule, tablet, pills, syrup, injection, suspension injection, and other drug delivery systems for treating peptic ulcer and duodenal ulcer.

ΙT 113712-98-4, Tenatoprazole

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination of Helicobacter pylori inhibitor/gastric acid secretion inhibitor for treating duodenal and peptic ulcer)

RN 113712-98-4 CAPLUS

3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-CN pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

L3 ANSWER 58 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:604613 CAPLUS

DOCUMENT NUMBER: 145:70051

TITLE: Solid dosage form comprising proton pump inhibitor and

suspension made thereof

INVENTOR(S): Persson, Eva; Trofast, Eva PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
SOURCE: U.S. Pat. Appl. Publ., 14 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA.	TENT	NO.			KIN		DATE				LICAT	-				ATE	
	2006				A1		2006	0622		US	2005-	3128	69		2	0051	
AU	2005	3197	32		A1		2006	0629		ΑU	2005-	3197	32		2	0051	220
CA	2592	030			A1		2006	0629		CA	2005-	2592	030		2	0051	220
WO	2006	0685	96		A1		2006	0629		WO	2005-	SE19	72		2	0051	220
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	ΚE,	KG,	KM,	KN,	KP,	KR,
		KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY	, MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH	, PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR	, TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	ZW											
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PΤ	, RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML	, MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM										
EP	1830	816			A1		2007	0912		EP	2005-	8208	24		2	0051	220
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	NL,	PL	, PT,	RO,	SE,	SI,	SK,	TR,	AL,
		BA,	HR,	MK,	YU												
CN	1010	8759	0		Α		2007	1212		CN	2005-	8004	4194		2	0051	220
IN	2007	DN04	584		Α		2007	0831			2007-		-		_	0070	614
MX	2007	0742	3		Α		2007	0717		MX	2007-	7423			2	0070	619
KR	2007	0946	10		Α		2007	0920		KR	2007-	7140	98		2	0070	621
US	2008	0020	053		A1		2008	0124		US	2007-	7223	87		2	0070	621
NO	2007	0037	31		Α		2007	0924		ИО	2007-	3731			2	0070	718
RIORIT	Y APP	LN.	INFO	.:						US	2004-	6384	35P		P 2	0041	222
										WO	2005-	SE19	72	1	W 2	0051	220

- A solid, rapidly gelling oral pharmaceutical dosage form, as well as an AB aqueous formulation prepared thereof, comprising (a) an acid sensitive proton pump inhibitor as active ingredient distributed in a multitude of enteric coated pellets, and (b) a suspension modifying granulate. Furthermore, the invention relates to an improved process for the manufacture and the use of such formulation in medical treatment, including prevention of gastrointestinal disorders in humans. For example, enteric-coated pellets were manufactured from (i) a core material comprising esomeprazole magnesium trihydrate 445 g, sugar sphere seeds 300 g, hydroxypropyl Me cellulose 67 g, Polysorbate 80 9 g, and water 2100 g, (ii) a subcoating layer comprising hydroxypropyl cellulose 90 g, talc 340 g, magnesium stearate 22 g, and water 3100 g, and (iii) an enteric coating layer comprising methacrylic acid copolymer type C (30% dispersion) 1270 g, tri-Et citrate 38 g, mono- and diglycerides 19 g, Polysorbate 80 2 g, and water 500 g. Suspension layering was performed in a fluid bed apparatus using a bottom spray technique.
- IT 113712-98-4, Tenatoprazole 113712-98-4D, Tenatoprazole, enantiomers and salts

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (solid oral dosage form comprising proton pump inhibitor enteric coated pellets and suspension modifying granulate)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & N \\ \end{array}$$
 S - CH₂ N Me OMe

L3 ANSWER 59 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:522777 CAPLUS

DOCUMENT NUMBER: 145:369603

TITLE: Comparison of the effects of fasting morning, fasting

evening and fed bedtime administration of tenatoprazole on intragastric pH in healthy

volunteers: a randomized three-way crossover study
AUTHOR(S): Thomson, A. B. R.; Cohen, P.; Ficheux, H.; Fiorentini,

P.; Domagala, F.; Homerin, M.; Taccoen, A.

CORPORATE SOURCE: Department of Medicine, Division of Gastroenterology,

University of Alberta, Edmonton, Can.

SOURCE: Alimentary Pharmacology and Therapeutics (2006),

23(8), 1179-1187

CODEN: APTHEN; ISSN: 0269-2813

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

Background: The effectiveness of proton pump inhibitors is influenced by meals and administration time. Aim: To compare the effects on intragastric acidity of times of dosing of tenatoprazole, a novel imidazopyridine-based proton pump inhibitor with a prolonged plasma half-life. Methods: This randomized three-period crossover study included 12 Helicobacter pylori-neg. healthy subjects, who received tenatoprazole $40~\mathrm{mg}$ either fasting at 7.00 am, fasting at 7.00 pm or fed at 9.30 pm for 7 days, with a 2-wk washout between periods. Twenty-four hour intragastric pH was monitored on day 7 of each period. Results: On day 7, median 24-h pH was 4.7, 5.1 and 4.7 after breakfast, dinner and bedtime dosing, resp. (P = 0.11), whereas night-time pH was 4.2, 5.0 and 4.4 (P =The mean 24-h percentage of time over pH 4 was 62, 72 and 64 after breakfast, dinner and bedtime dosing, resp. (N.S.), and 54, 68 and 56 during night-time (P = 0.06). Nocturnal acid breakthrough incidence decreased from 100% at baseline to 83%, 55% and 75% after 7.00 am, 7.00 pm and 9.30 pm dosing, resp. (P = 0.18), and its mean duration dropped from 6.2 to 2.8, 1.0 and 2.2 h, resp. (P < 0.05). Conclusion: Seven-day administration of tenatoprazole provides a prolonged duration of acid suppression, especially during the night-time, with little effect of food or time of dosing.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(imidazopyridine-based proton pump inhibitor tenatoprazole inhibited intragastric acidity during fasting morning, fasting evening and fed bedtime in healthy Caucasian, Asian and African-American volunteer)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 60 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:388649 CAPLUS

DOCUMENT NUMBER: 144:412513

TITLE: Process for the preparation of tenatoprazole salts INVENTOR(S): Joshi, Ramesh Anna; Joshi, Rohini Ramesh; Wakchaure,

Vijay Naryan; Gurjar, Mukund Keshav

PATENT ASSIGNEE(S): India

SOURCE: U.S. Pat. Appl. Publ., 5 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060089376	A1	20060427	US 2004-973983	20041027
US 20060089377	A1	20060427	US 2005-175027	20050706
US 20060270711	A1	20061130	US 2006-490247	20060721
PRIORITY APPLN. INFO.:			US 2004-973983	A1 20041027
			US 2005-175027	A3 20050706

OTHER SOURCE(S): CASREACT 144:412513

AB Li, Na, Ca, K, or Mg salts of 5-methoxy-2-(4-methoxy-3,5dimethylpyridin-2-ylmethylsulfinyl)imidazo[4,5-b]pyridine (i.e., tenatoprazole) are prepared in high yield and selectivity by oxidizing the corresponding tenatoprazole sulfide with an oxidant (e.g., m-chloroperbenzoic acid) and isolating the salt (Li, Na) by treatment with an alkali (e.g., sodium hydroxide) or exchanging the sodium salt of tenatoprazole with a Mg2+ or Ca2+ cation (e.g., by treatment of the sodium salt of tenatoprazole with calcium chloride).

IT 113713-24-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(in a process for the preparation of tenatoprazole salts)

RN 113713-24-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (CA INDEX NAME)

IT 335299-59-7P, Tenatoprazole sodium 335299-60-0P,

Tenatoprazole potassium 884304-67-0P, Tenatoprazole lithium

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(process for the preparation of tenatoprazole salts)

RN 335299-59-7 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 335299-60-0 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \text{N} & \text{N} \\ \text{NH} & \text{S-CH}_2 \\ \text{N} & \text{Me} \\ \end{array}$$

• K

RN 884304-67-0 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, lithium salt (9CI) (CA INDEX NAME)

● Li

IT 884304-68-1P, Tenatoprazole magnesium 884304-69-2P,

Tenatoprazole calcium

RL: SPN (Synthetic preparation); PREP (Preparation) (process for the preparation of tenatoprazole salts)

RN 884304-68-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, magnesium salt (2:1) (CA INDEX NAME)

●1/2 Mg

RN 884304-69-2 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, calcium salt (9CI) (CA INDEX NAME)

●1/2 Ca

L3 ANSWER 61 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:381291 CAPLUS

DOCUMENT NUMBER: 144:412510

TITLE: Process for the preparation of tenatoprazole salts INVENTOR(S): Joshi, Ramesh Anna; Joshi, Rohini Ramesh; Wakchaure,

Vijay Naryan; Gurjar, Mukund Keshav

PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India

SOURCE: PCT Int. Appl., 13 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	rent	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE	
WO	2006	0432	80		A1	_	2006	0427	,	WO 2	004-	 IN32	 8		2	0041	019
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
	NO, NZ, OI			OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
	TJ, TM, Ti			TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW: AT, BE, BO			BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
	IT, LU, MO			MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,
	CM, GA, GI			GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,	GM,	ΚE,	LS,
	MW, MZ, NA			NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,	KG,	KΖ,	MD,
	RU, TJ, TM																
IN	IN 2005DN01291						2008	0201		IN 2	005-	DN12	91		2	0050	331
RIT	Y APP	LN.	INFO	. :					•	WO 2	004-	IN32	8	Ţ	₩ 2	0041	019

PRIORITY APPLN. INFO.: CASREACT 144:412510

AB Li, Na, Ca, K, or Mg salts of 5-methoxy-2-(4-methoxy-3,5dimethylpyridin-2-ylmethylsulfinyl)imidazo[4,5-b]pyridine (i.e., tenatoprazole) are prepared in high yield and selectivity by oxidizing the corresponding tenatoprazole sulfide with an oxidant (e.g., m-chloroperbenzoic acid) and isolating the salt (Li, Na) by treatment with an alkali (e.g., sodium hydroxide) or exchanging the sodium salt of tenatoprazole with a Mg2+ or Ca2+ cation (e.g., by treatment of the sodium salt of tenatoprazole with calcium chloride).

IT 113713-24-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(in a process for the preparation of tenatoprazole salts)

RN 113713-24-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (CA INDEX NAME)

IT 335299-59-7P, Tenatoprazole sodium 335299-60-0P,

Tenatoprazole potassium 884304-67-0P, Tenatoprazole lithium

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(process for the preparation of tenatoprazole salts)

RN 335299-59-7 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-

pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

● Na

RN 335299-60-0 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt (9CI) (CA INDEX NAME)

● K

RN 884304-67-0 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, lithium salt (9CI) (CA INDEX NAME)

● Li

IT 884304-68-1P, Tenatoprazole magnesium 884304-69-2P,

Tenatoprazole calcium

RL: SPN (Synthetic preparation); PREP (Preparation)

(process for the preparation of tenatoprazole salts)

RN 884304-68-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, magnesium salt (2:1) (CA INDEX NAME)

●1/2 Mg

RN 884304-69-2 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, calcium salt (9CI) (CA INDEX NAME)

●1/2 Ca

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 62 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:376645 CAPLUS

DOCUMENT NUMBER: 145:373396

TITLE: Mechanism of gastric acid secretion AUTHOR(S): Shimatani, Tomohiko; Inoue, Masanori

CORPORATE SOURCE: Dept. of General Consultation, Hiroshima University

Hospital, Japan

SOURCE: Annual Review Shokaki (2006) 93-98

CODEN: ARSNAC Chugai Igakusha

PUBLISHER: Chugai Igakusha
DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

AB A review discusses roles of different factors such as Helicobacter pylori infection, aging, gender, histamine H2 receptor antagonist, genetic polymorphism of genes including MDR1 and gastric acid inhibitors including tenatoprazole and AZD0865 in regulation of gastric acid secretion.

IT 113712-98-4, Tenatoprazole

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mechanism of gastric acid secretion)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

L3 ANSWER 63 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:365327 CAPLUS

DOCUMENT NUMBER: 144:398349

TITLE: Extended-release compositions of proton pump

inhibitors

INVENTOR(S): Carter, John Paul

PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan SOURCE: PCT Int. Appl., 95 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAI	ENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
		2006				A2 A3		2006		,	WO 2	005-	US36	672		2	0051	012
			AE, CN, GE, LC, NA, SK,	AG, CO, GH, LK, NG,	AL, CR, GM, LR, NI, SM,	AM, CU, HR, LS, NO, SY,	AT, CZ, HU, LT, NZ,	AU, DE, ID, LU, OM, TM,	AZ, DK, IL, LV, PG,	DM, IN, LY, PH,	DZ, IS, MA, PL,	EC, JP, MD, PT,	EE, KE, MG, RO,	EG, KG, MK, RU,	ES, KM, MN, SC,	FI, KP, MW, SD,	GB, KR, MX, SE,	GD, KZ, MZ, SG,
DDIOD	T. III.3		AT, IS, CF, GM, KG,	BE, IT, CG, KE, KZ,	BG, LT, CI, LS, MD,	CH, LU, CM,	LV, GA, MZ,	CZ, MC, GN, NA, TM	NL, GQ,	PL, GW, SL,	PT, ML, SZ,	RO, MR, TZ,	SE, NE, UG,	SI, SN, ZM,	SK, TD, ZW,	TR, TG, AM,	BF, BW, AZ,	BJ, GH, BY,
PRIOR	ITY APPLN. INFO.:										US 2	004-	OT /T	65P		2	0041	UIZ

OTHER SOURCE(S): MARPAT 144:398349

AB The invention provides extended release compns. comprising at least one proton pump inhibitor, a polymer and a hydrogel. A composition comprises (i) a core which comprises a therapeutically effective amount of a proton pump inhibitor and a carrier, (ii) a first coat that surrounds the core comprising at least one polymer, (iii) a second coat that surrounds the first coat permeable to the passage of fluid and impermeable to the passage of proton pump inhibitor, and (iv) a passageway in the first and second coats for releasing the proton pump inhibitor from the core. The invention also provides methods for treating gastrointestinal disorders by administering the compns. of the invention to patients in need of gastrointestinal therapy. For example, extended-release tablets were prepared comprising a core containing rabeprazole sodium, mannitol and polyethylene glycol (PEG), a first coat containing Et cellulose and hydroxypropyl cellulose, and a sec. coat containing cellulose acetate and PEG.

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

```
L3 ANSWER 64 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN
```

ACCESSION NUMBER: 2006:324375 CAPLUS

DOCUMENT NUMBER: 144:370094

TITLE: Process for preparation of sulfoxides, particularly

tenatoprazole enantiomers and its analogs, by

enantioselective oxidation using titanium(IV)-based

catalyst and chiral α - or β -amino alcohol

ligand

INVENTOR(S): Cohen, Avraham; Schutze, Francois; Charbit, Suzy;

Martinet, Frederic; Gizecki, Patricia

PATENT ASSIGNEE(S): Sidem Pharma SA, Luxembourg

SOURCE: Fr. Demande, 22 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	TENT						DATE			APP	LICAT	ION				ATE	
FR	2876 2876	101			A1		2006 2007			FR	2004-	1048				0041	005
	2005									AII	2005-	.2911	56		2	0051	005
	2580				A1						2005-						
_	2006	-						-		-	2005-					0051	
,,,											BG,						
											EC,						
		,	,	,	,	,	•	,	,		, JP,	,	,	,	,	,	,
		•	,								MD,	•	•				
		•		,	•	,	•	•			PT,	,	•	,	,	,	
		•	,	,	,	,	,	,			, TZ,	,	•	,	,	,	,
		•	ZA,	•	•	·	,	,	•		,	ŕ	,	,	,	,	,
	RW:	AT,	BE,	BG,	CH,	CY	CZ,	DE,	DK,	EE	E, ES,	FI,	FR,	GB,	GR,	HU,	IE,
											, RO,						
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML	, MR,	NE,	SN,	TD,	TG,	BW,	GH,
											, TZ,						
		KG,	KΖ,	MD,	RU,	TJ,	, TM										
EP	1802	620			A1		2007	0704		ΕP	2005-	8042	08		2	0051	005
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	E, ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL	, PT,	RO,	SE,	SI,	SK,	TR	
CN	1010	3578	7		A		2007	0912		CN	2005-	8003	3860		2	0051	005
											2007-						
NO	2007	0015	24		Α		2007	0427		ИО	2007- 2007-	1524			2	0070	323
											2007-						
					A1		2007	1227			2007-					0070	
PRIORIT	ORITY APPLN. INFO.:										2004-						
											2005-	FR24			W 2	0051	005

OTHER SOURCE(S): CASREACT 144:370094; MARPAT 144:370094

The invention is related to the preparation of enantiomeric sulfoxide derivs., and their salts, particularly tenatoprazole enantiomers and its analogs, by enantioselective oxidation of sulfides of formula A-CH2-S-B [A = substituted pyridinyl; B = (un)substituted imidazo-pyridinyl] with an oxidation agent in the presence of a Ti(IV)-based catalyst and a chiral cyclic α - or β -amino alc. ligand, followed by optional salt formation. The advantages include high enantiomeric excess (e.e.), reduced amts. of undesired sulfones, high product purity and yield. Thus, addition of Ti(IV) isopropylate, followed by cumene hydroperoxide to a solution of 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfanyl]imida zo[4,5-b]pyridine and (1R,2S)-(+)-1-amino-2-indanol in anhydrous Py, and stirring the resulting mixture at 22° for 5 h gave

(S)-(-)-tenatoprazole in 97% e.e. with 4% sulfone in the crude product.

IT 705968-86-1P, (S)-(-)-Tenatoprazole 705969-00-2P,

(R)-(+)-Tenatoprazole

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(product; preparation of enantiomeric sulfoxides, particularly tenatoprazole and its analogs, by enantioselective oxidation in the presence of titanium(IV)-based catalyst and chiral amino alc. ligand)

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 113713-24-9, 5-Methoxy-2-[[(4-methoxy-3,5-dimethyl-2-

pyridinyl)methyl]sulfanyl]imidazo[4,5-b]pyridine

RL: RCT (Reactant); RACT (Reactant or reagent) (sulfide starting material; preparation of enantiomeric sulfoxides, particularly tenatoprazole and its analogs, by enantioselective oxidation in the presence of titanium(IV)-based catalyst and chiral amino alc.

ligand)

RN 113713-24-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 65 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:151614 CAPLUS

DOCUMENT NUMBER: 144:324114

TITLE: Pharmacokinetics of tenatoprazole, a newly synthesized

proton pump inhibitor, in healthy male caucasian

volunteers

AUTHOR(S): Domagala, Florence; Ficheux, Herve; Houin, Georges;

Barre, Jerome

CORPORATE SOURCE: NEGMA-GILD, Magny les Hameaux, Fr.

SOURCE: Arzneimittel Forschung (2006), 56(1), 33-39

CODEN: ARZNAD; ISSN: 0004-4172

PUBLISHER: Editio Cantor Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

The pharmacokinetics of tenatoprazole, a newly synthesized proton pump inhibitor, and its metabolites TU-501 (sulfide form) and TU-502 (sulfone form) were investigated in an ascending-dose parallel-group study at the dose levels of 10, 20, 40, 80 and 120 mg. A total of 30 healthy Caucasian male volunteers (6 in each dose group) received a single dose at Day 1 (fasted state) and repeated doses from Day 14 to Day 20. CYP2C19 genotype status was determined in all subjects. Concns. of tenatoprazole, TU-501 and TU-502 in plasma and urine were measured by a validated HPLC/MS/MS method. The single and multiple-dose study provided reliable tolerance. After the single administrations, plasma concns. reached a maximum between 2.5 and 4.3 h post dose, and thereafter decreased according to a terminal half live (T1/2) ranging from 4.8 to 7.7 h. Similar T1/2 were obtained on first and the last administration, and the steady state was reached after 5 days. Cmax and AUC increased linearly between 10 to 80 mg. However, with the 120 mg dose, the observed Cmax was higher than expected, especially at steady state. For TU-501 and TU-502 metabolites, Cmax and AUC increased linearly after repeated administration between 40 and 120 mg.

IT 113712-98-4, Tenatoprazole

RL: PKT (Pharmacokinetics); BIOL (Biological study)

(TU-199; pharmacokinetics of tenatoprazole, a newly synthesized proton pump inhibitor, in healthy male caucasian volunteers)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

IT 113713-24-9, TU 501 223713-77-7, TU 502

223713-85-7, TU 505

RL: ANT (Analyte); ANST (Analytical study)

(pharmacokinetics of tenatoprazole, a newly synthesized proton pump inhibitor, in healthy male caucasian volunteers)

RN 113713-24-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (CA INDEX NAME)

RN 223713-77-7 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfonyl]- (9CI) (CA INDEX NAME)

RN 223713-85-7 CAPLUS

CN 3-Pyridinemethanol, 4-methoxy-6-[[(5-methoxy-1H-imidazo[4,5-b]pyridin-2-yl)sulfinyl]methyl]-5-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 66 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:136566 CAPLUS

DOCUMENT NUMBER: 144:357280

TITLE: Characterization of the inhibitory activity of

tenatoprazole on the gastric H+,K+-ATPase in vitro and

in vivo

AUTHOR(S): Shin, Jai Moo; Homerin, Michel; Domagala, Florence;

Ficheux, Herve; Sachs, George

CORPORATE SOURCE: Department of Physiology and Medicine, David Geffen

School of Medicine, University of California at Los

Angeles, Los Angeles, CA, USA

SOURCE: Biochemical Pharmacology (2006), 71(6), 837-849

CODEN: BCPCA6; ISSN: 0006-2952

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

Tenatoprazole is a prodrug of the proton pump inhibitor (PPI) class, which AΒ is converted to the active sulfenamide or sulfenic acid by acid in the secretory canaliculus of the stimulated parietal cell of the stomach. This active species binds to luminally accessible cysteines of the gastric H+,K+-ATPase resulting in disulfide formation and acid secretion inhibition. Tenatoprazole binds at the catalytic subunit of the gastric acid pump with a stoichiometry of 2.6 nmol mg-1 of the enzyme in vitro. In vivo, maximum binding of tenatoprazole was 2.9 nmol mg-1 of the enzyme at 2 h after IV administration. The binding sites of tenatoprazole were in the TM5/6 region at Cys813 and Cys822 as shown by tryptic and thermolysin digestion of the ATPase labeled by tenatoprazole. Decay of tenatoprazole binding on the gastric H+,K+-ATPase consisted of two components. One was relatively fast, with a half-life 3.9 h due to reversal of binding at cysteine 813, and the other was a plateau phase corresponding to ATPase turnover reflecting binding at cysteine 822 that also results in sustained inhibition in the presence of reducing agents in vitro. The stability of inhibition and the long plasma half-life of tenatoprazole should result in prolonged inhibition of acid secretion as compared to omeprazole. Further, the bioavailability of tenatoprazole was two-fold greater in the (S)-tenatoprazole sodium salt hydrate form as compared to the free form in dogs which is due to differences in the crystal structure and hydrophobic nature of the two forms.

IT 113712-98-4 705968-86-1, (S)-Tenatoprazole 705968-89-4 871567-50-9

RL: PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(characterization of inhibitory activity of tenatoprazole on gastric H+,K+-ATPase in vitro and in vivo)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 705968-89-4 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

RN 871567-50-9 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt, monohydrate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

● Na

● H2O

IT 881235-03-6

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(characterization of inhibitory activity of tenatoprazole on gastric

H+,K+-ATPase in vitro and in vivo)

RN 881235-03-6 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt, monohydrate (9CI) (CA INDEX NAME)

● Na

● H₂O

REFERENCE COUNT:

35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 67 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:42810 CAPLUS

DOCUMENT NUMBER: 144:239896

TITLE: Enteric formulations containing tenatoprazole and

basic materials

INVENTOR(S): Zhang, Aiming; Shi, Baojun; Zhang, Xiquan

PATENT ASSIGNEE(S): Jiangsu Chia-Tai Tianging Pharmaceutical Co., Ltd.,

Peop. Rep. China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 8 pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1628664	A	20050622	CN 2004-10054062	20040827
PRIORITY APPLN. INFO.:			CN 2004-10054062	20040827

AB The title medicine comprises core material containing tenatoprazole (or its basic salt), one or more isolation layers, and enteric incrustation. The title medicine can be used to produce capsules or tablets. The structure of the medicine can keep tenatoprazole in alkali microenvironment, thereby inhibit its degradation The isolation layers are made of non-acidic or inert materials to isolate tenatoprazole with acidic enteric incrustation, thereby the medicine can store for long time.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (enteric formulations containing tenatoprazole and basic materials for improved stability)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

L3 ANSWER 68 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1335598 CAPLUS

DOCUMENT NUMBER: 144:57370

TITLE: Preparation of sodium salt of S-tenatoprazole

monohydrate for therapeutic application

INVENTOR(S): Cohen, Avraham; Schutze, Francois; Charbit, Suzy;

Martinet, Frederic; Ficheux, Herve; Homerin, Michel

PATENT ASSIGNEE(S): Sidem Pharma S.A., Luxembourg

SOURCE: Fr. Demande, 19 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT	NO.			KIN:		DATE			APF	PLIC	ATI	ON I	.OV		D	ATE	
	2871				A1		2005	1223		FR	200	4-6	617			2	0040	617
FR	2871	800			В1		2006	0825										
AU	2005	2615	80		A1		2006	0119		AU	200	5-2	2615	80		2	0050	617
CA	2568	993			A1		2006	0119		CA	200	5-2	2568	993		2	0050	617
WO	2006	0058	53		A1		2006	0119		WO	200	5-E	R15	28		2	0050	617
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BE	3, E	ßG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	Z, E	C,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	S, J	P,	ΚE,	KG,	KM,	KP,	KR,	KZ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MΓ), M	IG,	MK,	MN,	MW,	MX,	MZ,	NA,
		NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PΊ	Γ, Γ	ю,	RU,	SC,	SD,	SE,	SG,	SK,
		SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ	Z, U	ΙA,	UG,	US,	UΖ,	VC,	VN,	YU,
		ZA,	ZM,	ZW														
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	Ξ, Ε	s,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,	RC), S	E,	SI,	SK,	TR,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MF	R, N	Œ,	SN,	TD,	TG,	BW,	GH,	GM,
		KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ	Ζ, τ	ΙĠ,	ZM,	ZW,	AM,	AZ,	BY,	KG,
		KZ,	MD,	RU,	ΤJ,	TM												
EP	1664	044			A1		2006	0607		ΕP	200	5-1	7787	49		2	0050	617
EP	1664	044			В1		2007	8080										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	₹, I	Τ,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑI	, I	R,	BG,	CZ,	EE,	HU,	PL,	SK,
		BA,	HR,	IS,	YU													
CN	1010	0185	8		А		2007	0718		CN	200	5-8	3001	9739		2	0050	617
AT	3693	66			T		2007	0815		ΑT	200	5-	7787	49		2	0050	617
JP	2008	5026	65		T		2008	0131		JΡ	200	7-5	5160	06		2	0050	617
BR	2005	0121	51		A		2008	0212		BR	200	5-1	1215	1		2	0050	617
ES	2290	921			Т3		2008	0216		ES	200	5-1	7787	49		2	0050	617
IN	2006	DN07	498		Α		2007	0817		IN	200	6-I	DN749	98		2	0061	212
MX	2006	PA14	849		A		2007	0323		MX	200	6-E	PA14	849		2	0061	215
US	2007	0179	176		A1		2007	0802									0070	105
NO	2007	0002	50		Α		2007	0314			200						0070	
KR	2007	0451	94		А		2007	0502		KR	200	7-7	7012	03		2	0070	117
IORIT:	APP	LN.	INFO	.:						FR	200	4-6	617			A 2	0040	617
										WO	200	5-E	R15	28		W 2	0050	617

- AB Sodium salt monohydrate of s-tenatoprazole is prepared for the treatment of digestive disorders. S-(-)-tenatoprazole (preparation given) was reacted with sodium hydroxide at 60° and the oil thus obtained was separated and purified to obtained sodium salt of S-(-)-tenatoprazole monohydrate, yield >90%.
- IT 113713-24-9 871567-50-9, S-(-)-Tenatoprazole sodium monohydrate
 - RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of sodium salt of S-tenatoprazole monohydrate for therapeutic application)

RN 113713-24-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (CA INDEX NAME)

RN 871567-50-9 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt, monohydrate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

● H₂O

IT 705968-86-1P, S-(-)-Tenatoprazole

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of sodium salt of S-tenatoprazole monohydrate for the rapeutic application)

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 69 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1314518 CAPLUS

DOCUMENT NUMBER: 144:51582

TITLE: Process for the preparation of pyridin-2-

ylmethylsulfinyl-1H-benzimidazoles via oxidation of

the corresponding sulfides in the presence of

zirconium or hafnium complexes.

INVENTOR(S): Kohl, Bernhard; Mueller, Bernd; Weingart, Ralf Steffen

PATENT ASSIGNEE(S): Altana Pharma AG, Germany SOURCE: PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.			KIND DATE		APPLICATION NO.					DATE						
WO	WO 2005118569			A1 20051215			WO 2005-EP52471				20050531						
	W:										, BG,						
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	ΚE,	KG,	KM,	KP,	KR,	KΖ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD	, MG,	MK,	MN,	MW,	MX,	MZ,	NA,
		NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PΤ	, RO,	RU,	SC,	SD,	SE,	SG,	SK,
		SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ	, UA,	UG,	US,	UZ,	VC,	VN,	YU,
		ZA,	ZM,	ZW													
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD	, SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT	, BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		•	•				•		•		, IT,			•			•
						•	BF,	ΒJ,	CF,	CG	, CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,
			,	•	TD,												
	AU 2005250175																
_							CA 2005-2568652 EP 2005-752651										
EP																	
	R:	,	,	,	,	,	,	,	,		, ES,	,	,	,	,	,	,
		,	,	,	,	LU,	MC,	ΝL,	PL,	PT	, RO,	SE,	SI,	SK,	IR,	AL,	BA,
ONT	1000	•	LV,	,			2007	0.00		○ 3. 7	2005	0001	7506		0	0050	F 3 1
	CN 1960987 BR 2005011515			20070509 20071226													
	2003						2007				2005- 2006-		-			0050	
	MX 2006PA13623 KR 2007031945							MX 2006-PA13623 KR 2006-726831									
	2007								-		2006-1				_	0061	
	2006				A		2007				2006-					0061	
	ORITY APPLN. INFO.:				1.1		_000				2003 2004-						
		·•		• •							2005-					0050	
															_		

OTHER SOURCE(S): CASREACT 144:51582

AB A process for preparing mixts. of enantiomers of proton pump inhibitors (PPIs) having a sulfinyl structure comprises oxidation of the corresponding sulfides in the presence of a mixture of enantiomers of chiral zirconium or hafnium complexes. Thus, 5-difluoromethoxy-2-[(3,4-dimethoxy-2-pyridinyl)methylthio]-1H-benzimidazole was heated with DL-tartaric acid bis(N-pyrrolidinamide) and zirconium tetra-n-propoxide in Me iso-Bu ketone at 40° for 1 h followed by addition of diisopropylethylamine and slow addition of cumene hydroperoxide to give 75% 5-difluoromethoxy-2-[(3,4-dimethoxy-2-pyridinyl)methylsulfinyl]-1H-benzimidazole.

IT 113712-98-4P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(claimed compound; preparation of pyridinylmethylsulfinylbenzimidazoles via oxidation of the corresponding sulfides in the presence of zirconium or hafnium complexes)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

6

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 70 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1193219 CAPLUS

DOCUMENT NUMBER: 143:440411

TITLE: Preparation of dialkoxy imidazopyridine derivatives

for treatment of gastrointestinal disorders

INVENTOR(S): Zimmermann, Peter Jan; Buhr, Wilm

PATENT ASSIGNEE(S): Altana Pharma AG, Germany SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT 1	. OV			KIN	D	DATE			APP	LIC	CATI	I NOI	. OV		Ε	ATE	
WO	2005	1057:	99		A1	_	2005	1110		wo	200	5-E	EP518	 851		2	20050	426
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB	3, B	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ	, E	C,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, J	ΓP,	KE,	KG,	KM,	KP,	KR,	KZ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD), M	íG,	MK,	MN,	MW,	MX,	MZ,	NA,
		•		•							•		•	•			SK,	
																	YU,	
		ZM,	•	,	,	,	·	,	,		•	,	,	,	,	,	,	,
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD), S	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	KZ,	MD,	RU,	ΤJ,	TM,	ΑT	. В	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IS	, I	Τ,	LT,	LU,	MC,	NL,	PL,	PT,
																	GW,	
		MR,	NE,	SN,	TD,	TG	·	,	·		•	·	·	·	·	~ .	ŕ	·
AU	2005	2382:	15 [.]	•	A1		2005	1110		AU	200	5-2	2382	15		2	0050	426
CA	2563	808			A1		2005	1110		CA	200	5-2	25638	808		2	0050	426
EP	1742	946																
	R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	., E	S,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PΤ	, R	20,	SE,	SI,	SK,	TR,	AL,	BA,
		HR,	LV,	MK,	YU													
CN	1946	722			Α		2007	0411		CN	200	5-8	3001	2903		2	0050	426
BR	2005	0102	51		A		2007	1023		BR	200	5-1	1025	1		2	0050	426
JP	2005 2007	5347:	23		Τ		2007	1129		JΡ	200	7-5	51003	30		2	0050	426
	2007						2007	0920		US	200	6-5	5788	44		2	0061	019
NO	2006	0052	00		Α		2006	1113		ΝО	200	6-5	5200			2	0061	113
IN	NO 2006005200 IN 2006MN01407				Α		2007	0608		IN	200	06-1	4N140	07		2	0061	120
ORIT	APP	LN.	INFO	. :						ΕP	200	4 - 1	10042	2		A 2	0040	428
														851			0050	
ER SO	R SOURCE(S):					REAC	T 14.	3:440	0411	; M	IARP	PAT	143	:440	411			

OTHER SOURCE(S): CASREACT 143:440411; MARPAT 143:440411

GΙ

Title compds. I [R1 = alkoxy or cycloalkylalkoxy; R2 = alkoxy; R3 = alkoxy or alkoxyalkoxy; R4 = H or alkyl] and their pharmaceutically acceptable salts, are prepared and disclosed as treatment for gastrointestinal disorders. Thus, e.g., II was prepared by coupling of 5-methoxy-3H-imidazo[4,5-b]pyridine-2-thiol with 2-chloromethyl-3,4-dimethoxy pyridinium chloride and subsequent oxidation. The ability of I to inhibit acid secretion on the perfused rat stomach was evaluated and it was revealed that selected compds. of the invention displayed inhibitory activity above 50%. Pharmaceutical compns. comprising I are disclosed.

II 868700-03-2P

RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(preparation of dialkoxy imidazopyridine derivs. for treatment of gastrointestinal disorders)

RN 868700-03-2 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-5-methoxy-(9CI) (CA INDEX NAME)

IT 868700-05-4P 868700-07-6P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of dialkoxy imidazopyridine derivs. for treatment of gastrointestinal disorders)

RN 868700-05-4 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 2-[(S)-[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-5-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 868700-07-6 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 2-[(R)-[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-5-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 868752-75-4P 868752-77-6P 868752-79-8P

868752-82-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of dialkoxy imidazopyridine derivs. for treatment of gastrointestinal disorders)

RN 868752-75-4 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 2-[(S)-[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-5-methoxy-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

RN 868752-77-6 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 2-[(S)-[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-5-methoxy-, magnesium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

●1/2 Mg

RN 868752-79-8 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 2-[(R)-[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-5-methoxy-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Na

RN 868752-82-3 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 2-[(R)-[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-5-methoxy-, magnesium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

●1/2 Mg

IT 868700-13-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of dialkoxy imidazopyridine derivs. for treatment of gastrointestinal disorders)

RN 868700-13-4 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 2-[[(3,4-dimethoxy-2-pyridinyl)methyl]thio]-5-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \text{N} & \text{OMe} \\ \hline & \text{N} & \text{S-CH}_2 & \text{OMe} \\ \hline & \text{NH} & \text{N} & \text{N} \end{array}$$

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 71 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1170588 CAPLUS

DOCUMENT NUMBER: 143:440408

TITLE: Preparation of imidazo[4,5-b]pyridine derivatives for

treatment of diseases caused by gastric acid

INVENTOR(S): Miyazawa, Shuhei; Harada, Hitoshi; Fujisaki, Hideaki;

Kubota, Atsuhiko; Kodama, Kotaro; Nagakawa, Junichi;

Watanabe, Nobuhisa; Oketani, Kiyoshi

PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan SOURCE: PCT Int. Appl., 120 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE				LICAT		.00		D	ATE	
WO	2005	1030	 49		A1	_	 2005	1103	,		2005-		 11		2	0050	421
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	ВВ	, BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	KE,	KG,	KM,	KP,	KR,	KZ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD	, MG,	MK,	MN,	MW,	MX,	MZ,	NA,
		NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO	, RU,	SC,	SD,	SE,	SG,	SK,	SL,
		SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA	, UG,	US,	UZ,	VC,	VN,	YU,	ZA,
		ZM,	ZW														
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD	, SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
					•						, BE,			•			
				•					•		, IT,			•	•		
							BF,	ВJ,	CF,	CG	, CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,
		•	•	•	TD,												
	2005										2005-						
_	2562				A1						2005-						
											2005-						
EP	1737										2005-					0050	
	K:										, ES,						
			LV,			ь∪,	MC,	мь,	PL,	PI	, RO,	SE,	51,	SK,	IK,	ΑЬ,	BA,
CM	1976			,			2007	NENE		CM	2005-	2001	1558		2	0050	421
	2005						2007				2005-		1330			0050	
	2007						2007				2006-					0050	
	2006				Ā1		2006			US	2006-	3857	86		2	0060	
	2006				A		2007			MX	2006-1	PA11	993		2	0061	
IN	2006	DN06			А		2007	0831			2006-1					0061	019
KR	2007	0071					2007	0112			2006-						
NO	2006	0049	02		Α		2006	1204			2006-					0061	
IORIT	Y APP								2004-								
								US	2005-	1107	56		A1 2	0050	421		
									•	WO	2005-	JP83	11		W 2	0050	421
THER S	OURCE	(S):			CASI	REAC	T 14.	3:440	0408	: M	ARPAT	143	: 440	408			

OTHER SOURCE(S): CASREACT 143:440408; MARPAT 143:440408 GI

AB Title compds. represented by the formula I [wherein R1 = (un)substituted (cyclo)alkyl, alkenyl, alkynyl or phenyl; R2 = H or alkyl; R3 = Me or Et; R4 = alkyl; R5 = H; and their salts or hydrates thereof] were prepared For example, II (I: R1-R4 = Me, R5 = H) was provided in a multi-step synthesis starting from 2-fluoro-3-methylpyridine. II showed inhibition of gastric acid secretion in rat with 79% inhibition rate, and were tested for cytochrome P 450 gene induction in human cryopreserved hepatocytes. Thus, I and their pharmaceutical compns. are useful for the treatment of the disease caused by gastric acid, such as gastric ulcer.

IT 868539-24-6P, 5-Methoxy-2-[[(4-methoxy-3-methyl-2 pyridinyl)methyl]sulfinyl]-6-methyl-3H-imidazo[4,5-b]pyridine
868539-55-3P 868539-56-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of imidazo[4,5-b] pyridine derivs. for treatment of diseases caused by gastric acid)

RN 868539-24-6 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3-methyl-2-pyridinyl)methyl]sulfinyl]-6-methyl- (9CI) (CA INDEX NAME)

RN 868539-55-3 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3-methyl-2-pyridinyl)methyl]sulfinyl]-6-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 868539-56-4 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3-methyl-2-pyridinyl)methyl]sulfinyl]-6-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 868539-19-9P, 5-Methoxy-2-[[(4-methoxy-3-methyl-2-pyridinyl)methyl]sulfinyl]-6-methyl-3H-imidazo[4,5-b]pyridine Sodium salt 868539-43-9P, 2-[[(3-Ethyl-4-methoxy-2-pyridinyl)methyl]sulfinyl]-5-methoxy-6-methyl-3H-imidazo[4,5-b]pyridine sodium salt 868539-59-7P 868539-60-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

Uses)
(preparation of imidazo[4,5-b]pyridine derivs. for treatment of diseases caused by gastric acid)

RN 868539-19-9 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3-methyl-2-pyridinyl)methyl]sulfinyl]-6-methyl-, sodium salt (9CI) (CA INDEX NAME)

● Na

RN 868539-43-9 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 2-[[(3-ethyl-4-methoxy-2-pyridinyl)methyl]sulfinyl]-5-methoxy-6-methyl-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 868539-59-7 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3-methyl-2-pyridinyl)methyl]sulfinyl]-6-methyl-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Na

RN 868539-60-0 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3-methyl-2-pyridinyl)methyl]sulfinyl]-6-methyl-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● Na

(preparation of imidazo[4,5-b]pyridine derivs. for treatment of diseases caused by gastric acid)

RN 868539-23-5 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3-methyl-2-pyridinyl)methyl]thio]-6-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{Me} \\ \text{MeO} & \text{N} & \text{N} \\ \text{NH} & \text{S-CH}_2 & \text{N} \\ \end{array}$$

REFERENCE COUNT:

10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 72 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1155541 CAPLUS

DOCUMENT NUMBER: 143:416253

TITLE: Combination of proton pump inhibitor, buffering agent,

and prokinetic agent for treatment of gastric diseases

INVENTOR(S): Proehl, Gerald T.; Hall, Warren; Olmstead, Kay;

Hepburn, Bonnie

PATENT ASSIGNEE(S): Santarus, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 34 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P.	ΑT	ENT I	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
		2005							1027			005-					0050	
A	U	2005	2493	67		A1		2005	1215		AU 2	005-	2493	67		2	0050	415
C.	A	2561	700			A1		2005	1215		CA 2	005-	2561	700		2	0050	415
W	О	2005	1178	70		A2		2005	1215		WO 2	005 - 1	US12	863		2	0050	415
M	О	2005	1178	70		АЗ		2006	0427									
		W:										BG,						
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΜ,	KΡ,	KR,	KΖ,
			LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NΑ,
			NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,
			SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	ΤZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,
			ZM,	ZW														
		RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙΤ,	LT,	LU,	MC,	NL,	PL,	PT,
			RO,	SE,	SI,	SK,	TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GO,	GW,	ML,
			MR.	NE.	SN.	TD,	TG	·	,		,	·	•	•	•		•	•
E.	Ρ	1742						2007	0117		EP 2	005-	8047	74		2	0050	415
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
												RO,					,	•
J.	Р	2007															0050	415
	JP 2007532677 MX 2006PA11820																0061	
	ITY APPLN. INFO.:								0			004-						
,ı.ı	ITY APPLN. INFO.:											005-					0050	
_				-								005						

AB Pharmaceutical compns. comprising a proton pump inhibitor, one or more buffering agent and a prokinetic agent are described. Methods are described for treating gastric acid related disorders, using pharmaceutical compns. comprising a proton pump inhibitor, a buffering agent, and a prokinetic agent.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination of proton pump inhibitor, buffering agent, and prokinetic agent)

RN 113712-98-4 CAPLUS

L3 ANSWER 73 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1115210 CAPLUS

DOCUMENT NUMBER: 144:141930

TITLE: Effect on intragastric pH of a PPI with a prolonged

plasma half-life: comparison between tenatoprazole and esomeprazole on the duration of acid suppression in

healthy male volunteers

AUTHOR(S): Hunt, Richard H.; Armstrong, David; James, Cindy;

Chowdhury, Sadat K.; Yuan, Yuhong; Fiorentini, Paola;

Taccoen, Alain; Cohen, Patrick

CORPORATE SOURCE: Division of Gastroenterology, McMaster University

Medical Centre, Hamilton, ON, Can.

SOURCE: American Journal of Gastroenterology (2005), 100(9),

1949-1956

CODEN: AJGAAR; ISSN: 0002-9270

PUBLISHER: Blackwell Publishing, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

OBJECTIVE: To compare the inhibitory effect of a novel proton pump AΒ inhibitor (PPI), tenatoprazole 40 mg once daily, with esomeprazole 40 mg once daily on intragastric acidity. METHODS: A randomized, investigator-blind, two-way, crossover study was conducted in 30 healthy Helicobacter pylori neg. male volunteers. Tenatoprazole 40 mg or esomeprazole 40 mg was administered once daily for 7 consecutive days with a 4-wk washout period between treatments. Ambulatory 24-h intragastric pH was recorded at baseline, after 7 days' treatment, and 3 and 5 days after treatment was stopped. RESULTS: At presumed steady-state (day 7), median 24-h pH values were 5.02 and 4.79 for tenatoprazole and esomeprazole, resp. There was a significant difference between tenatoprazole and esomeprazole during the nocturnal period when mean pH was 4.64 ± 0.67 vs. 3.61 \pm 0.90, resp. (p < 0.0001), as well as a significantly higher mean percentage of time with pH >4 on tenatoprazole (72.5 ± 14.9 vs 62.2 ± 13.6 , p < 0.0001). The effect of tenatoprazole was still present 5 days after treatment withdrawal especially during the night-time.

The

mean area under the plasma concentration-time curve and elimination half-time

was

significantly higher in the tenatoprazole group as compared with the esomeprazole group. CONCLUSION: Tenatoprazole 40 mg daily provides a prolonged duration of acid suppression and a shorter nocturnal acid breakthrough in healthy volunteers, even after stopping the drug. Thus, tenatoprazole may provide greater clin. efficacy for patients in whom a once daily PPI is ineffective. Further studies are indicated.

IT 113712-98-4, Tenatoprazole

RL: ADV (Adverse effect, including toxicity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(proton pump inhibitor tenatoprazole 40 mg daily provide prolonged duration of acid suppression and shorter nocturnal acid breakthrough compared to esomeprazole in healthy male volunteers)

RN 113712-98-4 CAPLUS

L3 ANSWER 74 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1066889 CAPLUS

DOCUMENT NUMBER: 143:411014

TITLE: Composite medicine for treating digestive system ulcer

INVENTOR(S): Kong, Qingzhong; Liu, Enxiang; Zhang, Jie

PATENT ASSIGNEE(S): Peop. Rep. China

SOURCE: Faming Zhuanli Shenging Gongkai Shuomingshu, 12 pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1559612	A	20050105	CN 2004-10023583	20040218
PRIORITY APPLN. INFO.:			CN 2004-10023583	20040218
AD The title medicine	contoin	0 0+ 1000+	one bistomine recentor	antaganiat

AB The title medicine contains at least one histamine receptor antagonist selected from cimetidine, ranitidine, lafutidine, famotidine and roxatidine, and at least one H+/K+-ATPase (proton pump) inhibitor selected from tenatoprazole, omeprazole, lansoprazole, rabeprazole, pantoprazole, esomeprazole, leminoprazole, dosmalfate and sofalcone. The medicine can be made into various dosage forms such as granules, tablets, capsules, gels and injections, and is applied in the prevention and treatment of gastric ulcer and duodenal ulcer by effectively inhibiting gastric acid secretion.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(composite medicine for treating digestive system ulcer)

RN 113712-98-4 CAPLUS

L3 ANSWER 75 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1050500 CAPLUS

DOCUMENT NUMBER: 143:332598

TITLE: Stable pharmaceutical composition comprising an acid

labile pharmaceutically active substituted

benzimidazole compound and methods for preparation

INVENTOR(S): Di Capua, Simona; Shterman, Nava; Ari-Pardo, Limor;

Itah, Esther

PATENT ASSIGNEE(S): Israel

SOURCE: U.S. Pat. Appl. Publ., 12 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					D	DATE			APPL	ICAT	ION :	NO.		D.	ATE		
US CA WO	2005 2005 2558 2005	0214 535 0922	372 97		A1 A1 A2			0929 1006 1006		US 2 CA 2	005-	6888 2558	9 535		2 2	0050 0050	302 302	
WO		AE, CN, GE, LK, NO, SY, BW, AZ, EE, RO,	AG, CO, GH, LR, NZ, TJ, GH, BY, ES, SE,	AL, CR, GM, LS, OM, TM, GM, KG, FI,	AM, CU, HR, LT, PG, TN, KE, KZ, FR, SK,	AT, CZ, HU, LU, TR, LS, MD, GB, TR,	AU, DE, ID, LV, PL, TT, MW, RU, GR,	AZ, DK, IL, MA, PT, TZ, MZ, TJ, HU,	BA, DM, IN, MD, RO, UA, NA, TM, IE,	DZ, IS, MG, RU, UG, SD, AT, IS,	EC, JP, MK, SC, US, SL, BE, IT,	EE, KE, MN, SD, UZ, SZ, BG, LT,	EG, KG, MW, SE, VC, TZ, CH, LU,	ES, KP, MX, SG, VN, UG, CY,	FI, KR, MZ, SK, YU, ZM, CZ, NL,	GB, KZ, NA, SL, ZA, ZW, DE, PL,	GD, LC, NI, SM, ZM, AM, DK, PT,	ZW
CN JP MX	EE, ES, F1 RO, SE, S1 MR, NE, SN EP 1720527 R: AT, BE, BC IS, IT, L1 HR, LV, MR CN 1964704 JP 2007526319 MX 2006PA09991					CY, LU,	CZ, MC, 2007 2007 2007	DE, NL, 0516 0913 0410	DK, PL,	EE, PT, CN 2 JP 2 MX 2	ES, RO, 005- 007- 006-	FI, SE, 8001 5019 PA99	FR, SI, 3417 00 91	GB, SK,	GR, TR, 2 2 2	HU, AL, 00503 00503	IE, BA, 302 302 831	
PRIORIT	2006 Y APP				Α		2007	0803		US 2	006- 004- 005-	5496	53P	:	P 2		303	

AB The present invention provides a stable pharmaceutical composition of an acid labile drug such as a pharmaceutically active substituted benzimidazole compound, comprising: (a) an inner core coated with the acid labile drug; (b) a first intermediate coating devoid of an alkaline stabilizing agent and the benzimidazole compound; (c) a second intermediate coating comprising an alkaline stabilizing agent; and, (d) an outer enteric layer. The present invention also provides a method of preparing the same.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (stable pharmaceutical composition comprising acid labile pharmaceutically active substituted benzimidazole compound and methods for preparation)

RN 113712-98-4 CAPLUS

L3 ANSWER 76 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1004546 CAPLUS

DOCUMENT NUMBER: 143:272594

TITLE: Stable capsule preparations containing unstable drugs

INVENTOR(S): Nagahara, Naoki; Ito, Hiroki; Nonomura, Muneo PATENT ASSIGNEE(S): Takeda Pharmaceutical Company Limited, Japan

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

		ΝΟ.			KIN	D	DATE				_	ION I			D	ATE		
		50846			A1										2	0050	303	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
							DE,											
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	
							LV,											
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	
		•		•	•	•	TT,	•	,	•		•	,	•	•	,	•	ZW
	RW				MW,													
		KG,	KZ,	MD,	RU,	TJ,	TM.	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,			
		•	•		GR,	•	•	•		•	•	•	•	•	•			
							BF,											
			NE,				,	•		•	,	- ,	- '	- '	~ /	- '	•	
CZ	A 255	7634					2005	0915	(CA 2	005-	2557	634		2	0050	303	
EI	P 172	1604			A1		2006	1115		EP 2	005-	7199.	25		2	0050	303	
		AT,																
		•		•	•	•	MC,	•	,	•			,	•	•	·	,	
US	S 200	70141	•	•			•		•		•		•			0060	830	
PRIORI:												6061						
*												JP36.	_					
O	001100	- (0)					1 40	0705										

OTHER SOURCE(S): MARPAT 143:272594

AB A capsule containing an active ingredient unstable to the moisture, such as an imidazole compound as proton pump inhibitor, is stabilized by lowering the moisture content of a solid preparation (granules, microgranules, tablets, etc.) and then filling in a capsule comprising a water-soluble polysaccharide such as pullulan as the main component or a PEG-containing gelatin in shells. For the further stabilization, the capsule may be dried. For example, capsules containing (R)-lansoprazole were formulated.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (manufacture of stable capsule prepns. containing unstable drugs to moisture)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 77 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:902714 CAPLUS

DOCUMENT NUMBER: 143:235463

TITLE: Combination of proton pump inhibitor, buffering agent,

and nonsteroidal anti-inflammatory agent

INVENTOR(S): Proehl, Gerald T.; Olmstead, Kay; Hall, Warren

PATENT ASSIGNEE(S): Santarus, Inc., USA SOURCE: PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT I	.OV			KINI)	DATE		;	APPL	ICAT	ION 1	NO.		D	ATE		
	2005									WO 2	005-	US37	91		2	0050	204	
WO	2005																_	
	W:							ΑZ,										
		,	,	•	•	•		DK,	•		•	•	•		•	,	•	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NΑ,	NΙ,	
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW,	SM
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		AZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IS,	ΙT,	LT,	LU,	MC,	NL,	PL,	PT,	
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	
		MR,	NE,	SN,	TD,	ΤG												
AU	2005	2134	72		A1		2005	0825		AU 2	005-	2134	72		2	0050	204	
CA	2554	271			A1		2005	0825	(CA 2	005-	2554	271		2	0050	204	
US	2005	0249	806		A1		2005	1110	1	US 2	005-	5126	0		2	0050	204	
EP	17183	303			A2		2006	1108		EP 2	005-	7227	91		2	0050	204	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	
		BA,	HR,	IS,	YU													
JΡ	2007	5222	17		T		2007	0809		JP 2	006-	5531	74		2	0050	204	
MX	20061	PA09	036		Α		2006	1019]	MX 2	006-	PA90.	36		2	0060	809	
RITY	APP:	LN.	INFO	.:					1	US 2	004-	5436	36P		P 2	0040	210	
									1	wo 2	005-	US37	91		W 2	0050	204	

AB Pharmaceutical compns. comprising a proton pump inhibitor, one or more buffering agent and a nonsteroidal anti-inflammatory drug are described. Methods are described for treating gastric acid-related disorders and treating inflammatory disorders, using pharmaceutical compns. comprising a proton pump inhibitor, a buffering agent, and a nonsteroidal anti-inflammatory drug. For example, a powder for suspension formulation contained omeprazole 20 mg, ibuprofen 400 mg, sodium bicarbonate 1895 mg, Xylitol 300 (sweetener) 2000 mg, sucrose (sweetener) 1750 mg, sucralose (sweetener) 125 mg, xanthan gum 17 mg, peach flavor 47 mg, and peppermint 26 mg.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combination of proton pump inhibitor, buffering agent, and NSAID agent for treatment of gastric acid-related disorders and inflammation)

RN 113712-98-4 CAPLUS

L3 ANSWER 78 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:492425 CAPLUS

DOCUMENT NUMBER: 143:13406

TITLE: Solid pharmaceutical formulations containing proton

pump inhibitors and nonsteroidal antiinflammatory

agents

INVENTOR(S): Takada, Shiqeyuki; Koyama, Hiroyoshi; Hamaquchi,

Tadashi

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005145894 PRIORITY APPLN. INFO.:	A	20050609	JP 2003-386548 JP 2003-386548	20031117 20031117

OTHER SOURCE(S): MARPAT 143:13406

AB The invention relates to a solid pharmaceutical formulation characterized by containing granules or tablet of a proton pump inhibitor (PPI), and granules of a nonsteroidal antiinflammatory agent (NSAID), wherein the addition of the PPIN in the formulation prevents gastrointestinal injury due to NSAID. For example, a capsule containing lansoprazole granules (lansoprazole 30 mg) and diclofenac sodium sustained-release granules (diclofenac sodium 100 mg) was formulated.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (solid pharmaceutical formulations containing proton pump inhibitors and nonsteroidal antiinflammatory agents)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & N \\ \end{array}$$
 Me
$$\begin{array}{c|c} N & Me \\ \end{array}$$
 Me
$$\begin{array}{c|c} O & Me \\ \end{array}$$

L3 ANSWER 79 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:470233 CAPLUS

DOCUMENT NUMBER: 143:13313

TITLE: Methods and compositions for the treatment of

Helicobacter pylori-associated diseases using

endoperoxide bridge-containing compounds

INVENTOR(S):
Marash, Michael; Kluev, Elena

PATENT ASSIGNEE(S): Vecta Ltd., Israel SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

		CENT 1										LICAT					ATE	
	WO	2005	0489	12		A2			0602			2004-					0041	
		₩:	CN, GE, LK, NO,	CO, GH, LR, NZ,	CR, GM, LS, OM,	CU, HR, LT, PG,	CZ, HU, LU, PH,	DE, ID, LV, PL,	DK, IL, MA, PT,	DM, IN, MD, RO,	DZ IS MG RU	BG, EC, JP, MK, SC,	EE, KE, MN, SD,	EG, KG, MW, SE,	ES, KP, MX, SG,	FI, KR, MZ, SK,	GB, KZ, NA, SL,	GD, LC, NI, SY,
		R₩:	BW, AZ, EE, SE,	GH, BY, ES,	GM, KG, FI, SK,	KE, KZ, FR, TR,	LS, MD, GB,	MW, RU, GR,	MZ, TJ, HU,	NA, TM, IE,	SD AT IS	, UZ, , SL, , BE, , IT, , CM,	SZ, BG, LU,	TZ, CH, MC,	UG, CY, NL,	ZM, CZ, PL,	ZW, DE, PT,	AM, DK, RO,
	ΑIJ	2004	,	,	,			2005	0602		ΑIJ	2004-	2909	83		2	20041	117
	CA	2546	210			A1		2005	0602		CA	2004- 2004-	2546	210		2	0041	117
		R:										, IT, , HU,				SE,	MC,	PT,
		1882				А						2004-					0041	117
	JP	2007	5116	00		Τ						2006-					0041	
		2006										2006-					20060	
DDTO						А		2007	0504			2006-					20060	
PKIO	RIORITY APPLN. INFO.:											2003- 2004-					20031	
OTHE			(0)			117 5	D 7 III	1 10	1 2 2 1 1		W	2004-	100/	JJ		v	.0041	 /

OTHER SOURCE(S): MARPAT 143:13313

AB The present invention relates to methods and compns. for treating pathol. conditions associated with ferrous-dependent bacteria such as H. pylori in which high intracellular ferrous iron concentration is required for their survival and pathogenesis. The compns. of the invention comprise endoperoxide bridge-containing compds. that specifically inhibit the growth of the ferrous-dependent bacteria and preferably promote the eradication of the bacteria. The compns., typically also include at least one active agent for treating Helicobacter species-related gastrointestinal disorders, such as a proton pump inhibitor, an H2 blocker or a bismuth-containing compound Thus, each capsule contains the following ingredients: omeprazole as enteric-coated beads 40, artesunate granules 250, calcium carbonate 550, HPMC and Polox WSR-N60.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. for treatment of Helicobacter pylori-associated diseases using endoperoxide bridge-containing compds.)

RN 113712-98-4 CAPLUS

L3 ANSWER 80 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:423727 CAPLUS

DOCUMENT NUMBER: 142:469277

TITLE: Chewable tablet containing an acid-labile active

ingredient

INVENTOR(S): Sugaya, Masae; Koyama, Hiroyoshi; Hamaquchi, Naoru

PATENT ASSIGNEE(S): Takeda Pharmaceutical Company Limited, Japan

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT :	ΝΟ.			KIN	D	DATE			APPL	ICAT	ION I	МО.		D.	ATE	
WO	2005	0442	23		A1		2005	0519	1	WO 2	004-	JP16	701		2	0041	104
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BΖ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MΖ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	FΙ,	FR,	GB,	GR,	HU,	IE,	IS,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	
		SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,
		NE,	SN,	TD,	TG												
CA	2544	843			A1		2005	0519	(CA 2	004-	2544	843		2	0041	104
JP	2005	1544	31		Α		2005	0616		JP 2	004-	3200	57		2	0041	104
EP	1682	087			A1		2006	0726		EP 2	004-	7995	95		2	0041	104
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	IS	,	•	•
US	2007	0082	047		A1	•	2007	0412		US 2	006	5781.	36 ·		2	0060	503
PRIORIT	Y APP	LN.	INFO	.:						JP 2	003-	3784	70	i	A 2	0031	107
									1	WO 2	004-	JP16	701	Ţ	w 2	0041	104

OTHER SOURCE(S): MARPAT 142:469277

AB A chewable tablet comprises a group which contains an acid-labile active ingredient and at least one basic substance selected from alkaline earth metal carbonate, metal oxide and metal hydroxide, and a group which does not contain an acid-labile active ingredient and contains at least one ingredient selected from alkaline earth metal carbonate, metal oxide and metal hydroxide, wherein said chewable tablet is capable of rapidly neutralizing gastric acid and is preferably not enteric-coated, is provided. Tablets were prepared from granules containing lansoprazole, CaCO3, D-mannitol, and hydropropyl cellulose.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (chewable tablet containing an acid-labile active ingredient)

RN 113712-98-4 CAPLUS

L3 ANSWER 81 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:423720 CAPLUS

DOCUMENT NUMBER: 142:469276

TITLE: Combination of proton pump inhibitor and sleep aid

INVENTOR(S): Hall, Warren; Olmstead, Kay; Proehl, Gerald T.

PATENT ASSIGNEE(S): Santarus, Inc., USA SOURCE: PCT Int. Appl., 73 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APPL:	ICAT	ION 1	. OV		D.	ATE	
	2005 2005						2005 2005		1	WO 2	004-1	JS36	989		2	0041	105
	₩:	CN, GE, LK, NO,	CO, GH, LR, NZ,	CR, GM, LS, OM,	CU, HR, LT, PG,	CZ, HU, LU, PH,	AU, DE, ID, LV, PL,	DK, IL, MA, PT,	DM, IN, MD, RO,	DZ, IS, MG, RU,	EC, JP, MK, SC,	EE, KE, MN, SD,	EG, KG, MW, SE,	ES, KP, MX, SG,	FI, KR, MZ, SK,	GB, KZ, NA, SL,	GD, LC, NI, SY,
	TJ, TM, TM RW: BW, GH, GN AZ, BY, KO EE, ES, FI SE, SI, SH NE, SN, TI					LS, MD, GB,	MW, RU, GR,	MZ, TJ, HU,	NA, TM, IE,	SD, AT, IS,	SL, BE, IT,	SZ, BG, LU,	TZ, CH, MC,	UG, CY, NL,	ZM, CZ, PL,	ZW, DE, PT,	AM, DK, RO,
AU	2004	2874	85	·	A1		2005	0519		AU 2	004-	2874	85		2	0041	105
	2543 1686	976			A2		2005	0809		EP 2	004-	8183	47		2	0041	105
		IE,	SI,	FI,	RO,	CY,	ES, TR,	BG,	CZ,	EE,	HU,	PL,	SK,	IS	·	·	·
	2007 2006															0041 0060	
PRIORIT	Y APP	LN.	INFO	.:					1	US 2	003- 004-1	5177 JS36	43P 989]	P 2 W 2	0031 0041	105

AB Pharmaceutical compns. comprising a proton pump inhibitor, one or more buffering agent and a sleep aid are described. Methods are described for treating gastric acid related disorders and inducing sleep, using pharmaceutical compns. comprising a proton pump inhibitor, a buffering agent, and a sleep aid. Capsules were prepared containing omeprazole, buffers, triazolam sleep aid and excipients.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combination of proton pump inhibitor and sleep aid)

RN 113712-98-4 CAPLUS

L3 ANSWER 82 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:329705 CAPLUS

DOCUMENT NUMBER: 142:441631

TITLE: A comparative study of the early effects of

tenatoprazole 40 mg and esomeprazole 40 mg on

intragastric pH in healthy volunteers

AUTHOR(S): Galmiche, J. P.; Sacher-Huvelin, S.; Des Varannes, S.

Bruley; Vavasseur, F.; Taccoen, A.; Fiorentini, P.;

Homerin, M.

CORPORATE SOURCE: CIC-INSERM-CHU de Nantes, Toussus-le-Noble, Fr.

SOURCE: Alimentary Pharmacology and Therapeutics (2005),

21(5), 575-582

CODEN: APTHEN; ISSN: 0269-2813

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

Background: Tenatoprazole is a novel proton pump inhibitor with a seven-hour plasma half-life. Aim: To compare the effects of tenatoprazole 40 mg and esomeprazole 40 mg on intragastric acidity during the first 48 h in healthy volunteers. Methods: This randomized two-period crossover study included 24 Helicobacter Pylori-neg. subjects; tenatoprazole 40 mg or esomeprazole 40 mg daily were given before breakfast for two consecutive days, with a 2-wk wash-out between the administration periods. Intragastric pH was monitored for 48 h. Results: Over 48 h, tenatoprazole 40 mg exerted a more potent acid inhibition than esomeprazole 40 mg (median pH: 4.3 vs. 3.9, P < 0.08; per cent of time above pH 4: 57% vs. 49%, P < 0.03; proportion of subjects with at least half of the time above pH 4: 71% vs. 46%). These differences resulted from better night-time acid control with tenatoprazole 40 mg than esomeprazole 40 mg (first night median pH: 4.2 vs. 2.9, P < 0.0001; second night: 4.5 vs. 3.2, P < 0.0001). The duration of nocturnal acid breakthroughs was significantly reduced during both nights. In contrast, no significant difference was detected during the daytime periods between both regimens. Conclusion: Over the first 48 h, tenatoprazole 40 mg achieves a better overall and night-time control of gastric pH than esomeprazole 40 mg. The translation of better early control of acidity into clin. benefits deserves further studies.

IT 113712-98-4, Tenatoprazole

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (tenatoprazole 40 mg and esomeprazole 40 mg was well tolerated, suppressed acid production, where T40 was more potent than E40 in better overall night-time control with reduced nocturnal acid break through in H.pylori neg. healthy human)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 83 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:259878 CAPLUS

DOCUMENT NUMBER: 142:291467

TITLE: Use of known active ingredients as radical scavengers

INVENTOR(S): Simon, Wolfgang-Alexander; Sturm, Ernst

PATENT ASSIGNEE(S): Altana Pharma AG, Germany SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT :	NO.			KIND DATE			APPLICATION NO.					DATE					
WO	WO 2005025569					A1 20050324			WO 2004-EP52233					20040917				
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		AZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	
		SN,	TD,	ΤG														
AU	AU 2004271747				A1 20050324			AU 2004-271747					20040917					
CA	2538	910			A1		2005	0324	1	CA 2	004-	2538	910		2	0040	917	
EP	1670	469			A1		2006	0621		EP 2	004-	7668	22		2	0040	917	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	HR
US	2007	0027	189		A1 20070201			US 2006-571570				20060310						
CIORITY	APP	LN.	INFO	.:						EP 2003-21094					A 20030918			
											WO 2004-EP52233				W 20040917			

AB The invention relates to the use of certain proton pump inhibitors in the treatment of pathol. manifestations induced or influenced by free radicals.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(use of known active ingredients as radical scavengers)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 84 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:227058 CAPLUS

DOCUMENT NUMBER: 142:430268

TITLE: Preparation of (S) - and (R) - enantiomers of

tenatoprazole as H+/K+ ATPase inhibitors

INVENTOR(S): Li, Shuxin; Zhao, Yanjin; Guo, Jinhua

PATENT ASSIGNEE(S): Institute of Radiomedicine, Academy of Military

Medical Science of PLA, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	API	PLICATION NO.		DATE
					_	
CN 1453278	A	20031105	CN	2002-117637		20020510
PRIORITY APPLN. INFO.:			CN	2002-117289	Α	20020423
OTHER COHROLICA	CACDEA	СТ 142.42026	0			

Ι

OTHER SOURCE(S): CASREACT 142:430268

GΙ

AB The invention is related to (S)- and (R)-enantiomers of tenatoprazole I and pharmaceutically acceptable salts thereof, their preparation and uses. (S)-I was synthesized by enantioselective oxidation of the corresponding sulfide with dicumyl peroxide in the presence of (i-PrO)4Ti and D-tartaric acid di-Et ester in 71.5% yield. (R)-I was obtained via oxidation of the corresponding sulfide with m-chloroperbenzoic acid followed by chiral HPLC resolution (37.5% yield). The two enantiomers showed stronger activity than omeprazole and comparable activity to tenatoprazole both in an inhibition assay against H+/K+ ATPase and in a gastric acid secretion-inhibition test in rat. Therefore, the invented compds. are useful for the treatment of gastric acid secretion disorders.

IT 705969-00-2P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (S)- and (R)-enantiomers of tenatoprazole as H+/K+ ATPase inhibitors)

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 705968-86-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (S)- and (R)-enantiomers of tenatoprazole as H+/K+ ATPase inhibitors)

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 113713-24-9P, 5-Methoxy-2-(((4-methoxy-3,5-dimethylpyridin-2-

yl)methyl)thio)imidazolo[4,5-b]pyridine

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of (S)- and (R)-enantiomers of tenatoprazole as H+/K+ ATPase inhibitors)

RN 113713-24-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (CA INDEX NAME)

IT 113712-98-4P, Tenatoprazole

RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(reference; preparation of (S)- and (R)-enantiomers of tenatoprazole as $\mathrm{H}^{+}/\mathrm{K}^{+}$

ATPase inhibitors)

RN 113712-98-4 CAPLUS

L3 ANSWER 85 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:220143 CAPLUS

DOCUMENT NUMBER: 142:285224

TITLE: Pharmaceutical compositions comprising substituted

benzimidazole proton pump inhibitors and buffering

agents, and methods of use

INVENTOR(S): Phillips, Jeffrey O.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 56 pp., Cont.-in-part of U.S.

Ser. No. 722,184.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 20050054682	A1	20050310	US 2004-898135	20040723		
US 5840737	A	19981124	US 1996-680376	19960715		
US 6489346	В1	20021203	US 2000-481207	20000111		
US 20020045646	A1	20020418	US 2001-901942	20010709		
US 6645988	B2	20031111				
US 20030191159	A1	20031009	US 2002-54350	20020119		
US 6699885	B2	20040302				
US 20040171646	A1	20040902	US 2003-722184	20031125		
PRIORITY APPLN. INFO.:			US 1996-9608P	P 19960104		
			US 1996-680376	A2 19960715		
			US 1998-183422	B2 19981030		
			US 2000-481207	A2 20000111		
			US 2001-901942	A2 20010709		
			US 2002-54350	A1 20020119		
			US 2003-722184	A2 20031125		

AB The invention discloses, inter alia, pharmaceutical compns. comprising at least one proton pump inhibitor and at least one buffering agent. Compns. of the invention are useful in treating, inter alia, gastric acid related disorders.

IT 113712-98-4, Tenatoprazole 113712-98-4D, Tenatoprazole, derivs. and isomers

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. comprising substituted benzimidazole proton pump inhibitors and buffering agents, and methods of use)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & N & \\ \end{array}$$
 Me
$$\begin{array}{c|c} Me & \\ \end{array}$$
 Me
$$\begin{array}{c|c} O & \\ \\ Me & \\ \end{array}$$
 Me

L3 ANSWER 86 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:122883 CAPLUS

DOCUMENT NUMBER: 142:191277

TITLE: Alkaline salts of proton pump inhibitors

INVENTOR(S): Sturm, Ernst; Hummel, Rolf-Peter; Kohl, Bernhard;

Mueller, Bernd

PATENT ASSIGNEE(S): Altana Pharma AG, Germany SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	TENT			KIND			DATE										
										WO 2004-EP51578							
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	ΝI,
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,
AU	2004	2608	32		A1	1 20050210			AU 2004-260832					20040722			
CA	2532	774						-		-							
							2006	0503		EP 2	004-	7420	08		2	0040	722
EP	1651	217			В1		2008	0220									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
							,	,		•		,	,	,			
CN	1822	835			А												
JP	2006	5281	58		${ m T}$												
ΑT	3865	22			Τ												
MΧ	2006	PA00	652		Α												
				A1 20060824													
ΙN	2006	0 0 MM	166		А		2007	0622					-				
RIT:	AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE SN, TD, TG U 2004260832 A1 20050210 AU 2004-260832 20040722 A 2532774 A1 20050210 CA 2004-2532774 20040722 P 1651217 A1 20060503 EP 2004-742008 20040722 P 1651217 B1 20080220 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK N 1822835 A 20060823 CN 2004-80020260 20040722 P 2006528158 T 20061214 JP 2006-520838 20040722 X 2006PA00652 A 20060330 MX 2006-PA652 20060117 S 20060189590 A1 20060824 US 2006-564768 20060117 N 2006MN00166 A 20070622 IN 2006-MN166 20060213 TY APPLN. INFO.: EP 2003-16759 A 20030723																
																	_
									•	WO 2	004-	EP51	578	,	W 2	0040	722

- AB The invention relates to alkaline salts of proton pump inhibitors and to medicaments comprising these compds. Accordingly, the invention provides in a general aspect alkaline reacting salts of pyridin-2-ylmethylsulfinyl-1H-benzimidazoles with H+/K+-ATPase-inhibitory activity.
- IT 113712-98-4D, Tenatoprazole, metal salts 705968-86-1D,
 - (S)-Tenatoprazole, metal salts 705969-00-2D, (+)-Tenatoprazole, metal salts
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(alkaline salts of proton pump inhibitors such as pyridin-2-ylmethylsulfinyl-1H-benzimidazoles with H+/K+-ATPase-inhibitory activity for treatment of gastrointestinal disorders)

RN 113712-98-4 CAPLUS

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 87 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:99328 CAPLUS

DOCUMENT NUMBER: 142:183479

TITLE: Immediate-release formulation of acid-labile drugs

INVENTOR(S): Phillips, Jeffrey O.; Widder, Ken J.

PATENT ASSIGNEE(S): The Curators of the University of Missouri, USA;

Santarus, Inc.

SOURCE: PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	CENT 1	NO.			KIN)	DATE			APPL	ICAT	ION I	. O <i>V</i>		D.	ATE	
		2005 2005									WO 2	004-	JS23.	558		2	0040	722
	WO	W:						AU,		BA.	BB.	BG.	BR.	BW.	BY.	B7.	CA.	CH.
		** •	•			•		DE,										•
			•			•	•	ID,	•	•	•					•	•	
								LV,										
								PL,	,		•					,	,	
			•	•	•	•		TZ,				•						•
		RW:						MW,			•					,	,	
		AZ, BY, KG, KZ,																
		EE, ES, FI,						•		•	•					•		
			SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
			SN,	TD,	TG	·	·	·	·			·	·		·	·	·	·
	ΑU	2004	2589	84		A1		2005	0203		AU 2	004-	2589	84		2	0040	722
	CA	2533	588			A1		2005	0203		CA 2	004-	2533.	588		2	0040	722
	US	2005	0112	193		A1		2005	0526		US 2	004-	8966	82		2	0040	722
	ΕP	1660	043			A2		2006	0531		EP 2	004-	7788	79		2	0040	722
	R: AT, BE, CH,				DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			IE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK				
	JP 2006528198							2006	1214		JP 2	006-	5212:	32		2	0040	722
	MX 2006PA00873							2007	0409		MX 2	006-	PA87	3		2	0060	123
PRIOF	RITS	APP:	LN.	INFO	.:						US 2	003-	4893	63P]	2	0030	723
											WO 2	004-	JS23.	558	Ī	√ 2	0040	722

AB The present invention provides, inter alia, compns. comprising a pH buffering agent and a controlled-release component containing an acid-labile pharmaceutical. Methods of using such compns. are also provided. Microgranules of omeprazole were coated with Eudragit L30D-55.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (immediate-release formulation of acid-labile drugs)

RN 113712-98-4 CAPLUS

L3 ANSWER 88 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:76252 CAPLUS

DOCUMENT NUMBER: 142:183427

TITLE: Pharmaceutical formulation and method for treating

acid-caused gastrointestinal disorders

INVENTOR(S): Hall, Warren; Olmstead, Kay; Weston, Laura

PATENT ASSIGNEE(S): Santarus, Inc., USA SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KINI)	DATE			APPL	ICAT	ION 1	. O <i>V</i>		D	ATE	
	2005									WO 2	004-	US23	044		2	0040	716
	W:						AU,		BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
							DE,										
		•		•			ID,	•				•	•		•	•	•
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
	AZ, BY, KO				KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
	EE, ES, F				FR,	GB,	GR,	ΗU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
	SI, SK, TF				BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	$\mathrm{ML}_{m{\prime}}$	MR,	NE,
		•	TD,														
AU	2004						2005	-		-			-			0040	
	. 2531				A1		2005	0127		CA 2	004 -	2531	566		2	0040	716
US	2005						2005	0210		US 2	004-	8930	92		2	0040	716
EF	1648	417			A2		2006	0426		EP 2	004-	7785	12		2	0040	716
	R: AT, BE, CH				DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
	IE, SI, FI					CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK				
JF	2006	5281	82		T		2006	1214		JP 2	006-	5211	49		2	0040	716
MX	2006		А		2006	0811		MX 2	006-	PA52	4		2	0060	113		
PRIORIT	Y APP	.:						US 2	003-	4883	24P	I	2	0030	718		
										WO 2	004-1	US23	044	I	√ 2	0040	716

AB Oral pharmaceutical formulations in the form of a powder for suspension comprising (i) at least one proton pump inhibitor in micronized form; (ii) at least one antacid; and (iii) at least one suspending agents are provided. Also provided are methods for making and using pharmaceutical formulations comprising at least one proton pump inhibitor and at least one antacid. For example, an omeprazole powder for suspension was prepared containing sodium bicarbonate for protecting omeprazole from acid degradation in

vivo. The powder comprised omeprazole 20 mg, sodium bicarbonate 1895 mg, xylitol 300 (sweetener) 2000 mg, sucrose powder (sweetener) 1750 mg, sucralose (sweetener) 125 mg, xanthan gum 17 mg, peach flavor 47 mg, and peppermint 26 mg.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oral formulations containing antacid and proton pump inhibitor for treating acid-caused gastrointestinal disorders)

RN 113712-98-4 CAPLUS

L3 ANSWER 89 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:76250 CAPLUS

DOCUMENT NUMBER: 142:183426

TITLE: Pharmaceutical formulations useful for inhibiting acid

secretion

INVENTOR(S): Hall, Warren; Olmstead, Kay; Weston, Laura

PATENT ASSIGNEE(S): Santarus, Inc., USA SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	CENT 1	ΝΟ.			KIN	D	DATE				ICAT:				D.	ATE	
	2005 2005						2005 2005		,						2	0040	716
	₩:	CN,	CO,	CR,	CU,	CZ,	AU, DE, ID,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		LK, NO,	LR, NZ,	LS, OM,	LT, PG,	LU, PH,	LV, PL,	MA, PT,	MD, RO,	MG, RU,	MK, SC,	MN, SD,	MW, SE,	MX, SG,	MZ, SK,	NA, SL,	NI, SY,
	TJ, TM, TI RW: BW, GH, GI AZ, BY, KO EE, ES, F			GM, KG,	KE, KZ,	LS, MD,	MW, RU,	MZ, TJ,	NA, TM,	SD, AT,	SL, BE,	SZ, BG,	TZ, CH,	UG, CY,	ZM, CZ,	ZW, DE,	AM, DK,
		SI,		TR,			CF,										
AU	2004	2577	79		A1		2005	0127		AU 2	004 - 1	2577	79		2	0040	716
	2531																
EP	1648	-			A2		2006										
	R:		,				ES, TR,							NL,	SE,	MC,	PT,
JP	2006	5281	81		T		2006	1214		JP 2	006-	5211	43		2	0040	716
MX	2006	PA00.	529		Α		2006	0811]	MX 2	006-1	PA52	9		2	0060	113
RIORIT	APP:	LN.	INFO	. :						US 2						0030 0040	

AB In one general aspect of the present invention, oral pharmaceutical formulations comprising both a proton pump inhibitor microencapsulated with a material that enhances the shelf-life of the pharmaceutical composition and one or more antacid are described. In another general aspect of the present invention, pharmaceutical formulations comprising both a proton pump inhibitor microencapsulated with a taste-masking material and one or more antacid are described. For example, omeprazole was microencapsulated by spray drying of an aqueous mixture of Kollicoat IR, PEG 3350 and BHT at 10% of the encapsulated material. Encapsulated omeprazole (40 mg potency), sodium bicarbonate (1260 mg), calcium carbonate (790 mg), croscarmellose sodium (64 mg), Klucel (160 mg), Xylitab 100 (380 mg), microcryst. cellulose (128 mg), sucralose (162 mg), peppermint durarome (34 mg), peach flavor (100 mg), masking powder (60 mg), FD&C Lake Number 40 Red (3 mg), and magnesium stearate (32 mg) were pressed into chewable tablets with diams. of about 10 mm and average weight of approx. 600 mg per tablet.

IT 113712-98-4, Tenatoprazole

RL: PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oral formulations containing antacid and microencapsulated proton pump inhibitor for inhibition of gastric acid secretion)

RN 113712-98-4 CAPLUS

L3 ANSWER 90 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:55100 CAPLUS

DOCUMENT NUMBER: 142:141266

TITLE: Solid composition comprising a proton pump inhibitor

and therapeutic uses for gastrointestinal disorders

INVENTOR(S): Blychert, Eva; Janssen, Marjo

PATENT ASSIGNEE(S): Astrazeneca AB, Swed. SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P.	ATEI	1 TN	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
W	0 2	0050	00492	21		A1		2005	0120	,	WO 2	004-	SE11:	13		2	0040	708
	Ţ	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	ΒA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
			ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW: BW, GH, GI				GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
	AZ, BY, K				KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
			SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
			SN,	TD,	ΤG													
E:	P 1	6464	404			A1		2006	0419		EP 2	004-	7491	49		2	0040	708
]	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
	R: AT, BE, CI IE, SI, FI					RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK				
J:	JP 2007522086							2007	0809	1	JP 2	006-	5185	94		2	0040	708
U	US 20070053981							2007	0308	,	US 2	006-	5642	29		2	0061	002
PRIORI	TY A	APP1	LN.	INFO	.:						US 2	003-	4867	95P]	P 2	0030	711
										,	WO 2	004-	SE11	13	Ī	W 2	0040	708

AB The present invention related to a method for oral administration of a solid composition comprising an acid labile proton pump inhibitor compound in the

form of a multiple of enteric coating layered pellets, wherein the pellets are in admixt. With one or more pharmaceutically acceptable thickeners and an aqueous carrier, and the thickener is capable of forming a viscous medium when dispersed in the aqueous carrier. Alternatively, the enteric coated pellets are in admixt. With a viscous aqueous medium. The formed aqueous viscous

suspension is to be administered via a gastric tube. The method and composition are especially aimed for treatment of patients in need of a proton pump

inhibitor, i.e. in the treatment of gastrointestinal disorders and having difficulties to swallow or for pediatric patients.

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (solid composition comprising proton pump inhibitor and therapeutic uses for gastrointestinal disorders)

RN 113712-98-4 CAPLUS

7

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 91 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1033563 CAPLUS

DOCUMENT NUMBER: 142:28146

TITLE: Extended release compositions of proton pump

inhibitors

INVENTOR(S): Wood, Ray

PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan SOURCE: PCT Int. Appl., 100 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE				
WO	2004	1032	 91		A2	_	2004	1202	,	WO 2	004-1	US15	076		2	0040	513
WO	2004	1032	91		А3		2005	0324									
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE, GH, GM,				HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KΡ,	KR,	KΖ,	LC,
		LK, LR, LS,				LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	ΝI,
		LK, LR, LS, NO, NZ, OM,				PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,
		SN,	TD,	ΤG													
PRIORIT	Y APP	LN.	INFO	.:						US 2	003-	4708	76P		P 2	0030	516

OTHER SOURCE(S): MARPAT 142:28146

AB The invention provides extended release compns. comprising at least one proton pump inhibitor. The invention also provides methods for treating gastrointestinal disorders by administering the compns. of the invention to patients in need of gastrointestinal therapy.

US 2003-485744P

Ρ

20030710

IT 113712-98-4, Tenatoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (extended release compns. of proton pump inhibitors)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & N & \\ N & S - CH_2 & \\ Me & \\ OMe & \\ \end{array}$$

L3 ANSWER 92 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:968547 CAPLUS

DOCUMENT NUMBER: 142:28328

TITLE: Detection of related substances by RP-HPLC in

tenatoprazole tablets

AUTHOR(S): Xu, Song-lin; Wang, Dong-kai; Liu, Lai; Gao, Fei;

Cheng, Mao-sheng; Li, Hong-bin

CORPORATE SOURCE: Department of Pharmaceutics, Shenyang Pharmaceutical

University, Shenyang, 110016, Peop. Rep. China Zhongquo Xinyao Zazhi (2004), 13(9), 823-825

CODEN: ZXZHA6; ISSN: 1003-3734

PUBLISHER: Zhongguo Xinyao Zazhishe

DOCUMENT TYPE: Journal LANGUAGE: Chinese

SOURCE:

AB A method to determine the related substances in tenatoprazole tablets by RP-HPLC was established. The following assay conditions were established: Cra column (250 mm R 4.6mm, 5 m) as stationary phase; acetonitrile-phosphate buffers solution (30:70) as the mobile phase, and the detection wavelength at 306 nm. Separation of tenatoprazole from the related substances was attained. Three batches of samples were tested for the related substances. The result was 0.63%, 0.71%, 0.76%, resp. The simple and accurate method can be used to detect the related substances in tenatoprazole tablets.

IT 113712-98-4, Tenatoprazole

RL: ANT (Analyte); ANST (Analytical study)

(determination of tenatoprazole in tablets by RP-HPLC)

RN 113712-98-4 CAPLUS

L3 ANSWER 93 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:857598 CAPLUS

DOCUMENT NUMBER: 141:332197

TITLE: Method for the enantioselective preparation of

sulfoxide derivatives by asymmetric oxidation of sulfides with vanadium or tungsten catalysts and chiral ligands, and its application to the

enantioselective preparation of tenatoprazole and

omeprazole enantiomers

INVENTOR(S): Cohen, Avraham; Charbit, Suzy; Schutze, Francois;

Martinet, Frederic

PATENT ASSIGNEE(S): Sidem Pharma, Luxembourg SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	TENT															ATE 	
WO	2004 2004	0877	02		A2		2004	1014								0040	
	W:		•	•						,	BG,			•			•
											EC,						
		•						•			JP,						
			,	,	,	,	,		,	,	MK,	,	,	,	,	,	•
					,		,				SC,	,	,				•
	D					,					UZ,					•	
	RW:										SZ,						
			•	•			•			•	BG,			•		•	•
											MC,						
	SK, TR, E TD, TG					CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MK,	NE,	SN,
FD	2852	,	10		7\1		2004	1001		FD 2	2003-	2017			2	0030	328
	2852				B1		2004			FR Z	.005-	3314			4	0030	320
	2863						2005			FR 2	2003-	1467	a		2	0031	215
	2863						2006			LI 2	.005	1407	,		2	0031	210
	2520									CA 2	2004-	2520	157		2	0040	326
	1608										2004-						
											IT,						
											TR,						
CN	1823						2006				2004-						
JP	2006	5232															
IN	JP 2006523201 IN 2005DN03962						2007	0824		IN 2	2005-	DN39	62		2	0050	905
	MX 2005PA10250															0050	
US	US 20060281782						2006	1214								0060	
PRIORIT	Y APP	.:							2003-								
											2003-						
										WO 2	2004-	FR77	8	,	W 2	0040	326
OTHER S	OURCE	(S):			MAR:	PAT	141:	3321	97								

OTHER SOURCE(S): MARPAT 141:332197

The invention relates to a method for the enantioselective preparation of substituted sulfoxide derivs. by asym. oxidation of corresponding sulfides. The method comprises enantioselective oxidation of a sulfide A-CH2-S-B, where A is a variably substituted pyridyl nucleus and B is a heterocyclic group with a benzimidazole or imidazopyridyl nucleus, by an oxidizing agent in the presence of a W- or V-based catalyst and a chiral ligand, followed, where necessary, by salt formation with a base, to give a sulfoxide: A-CH2-SO-B. The method is applicable to the enantioselective preparation of compds. such as the enantiomers of tenatoprazole and other comparable sulfoxides. Oxidants include H2O2, urea-H2O2, cumene hydroperoxide, and tert-BuOOH. Catalysts include WO3, vanadium acetylacetonate, and vanadium

sulfate. Chiral ligands include amino alcs., amino ethers, amino acids and esters, and salicylaldehyde imine derivs. of these. For instance, the sulfide 5-methoxy-2-[[(4-methoxy-3, 5-dimethyl-2-

pyridyl)methyl]thio]imidazo[4,5-b]pyridine was oxidized by 30% H2O2 using WO3 and the chiral amino ether (DHQD)2-PYR (a cinchonan alkaloid) in THF at $4-5^{\circ}$ to give (S)-(-)-tenatoprazole in 70% yield and > 90%

enantiomeric excess (ee). Recrystn. from MeOH/H2O or DMF/EtOAc increased the ee to > 99%. A similar run using (DHQ)2-PYR as the chiral ligand gave (R)-(+)-tenatoprazole in 99% ee after recrystn. from DMF/EtOAc. Likewise, using (DHQD)2-PYR, (S)-(-)-omeprazole was obtained in a yield of 72% and approx. 90% initial ee.

IT 113713-24-9, 5-Methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]thio]imidazo[4,5-b]pyridine

RL: RCT (Reactant); RACT (Reactant or reagent)

(starting material; enantioselective preparation of sulfoxides by asym. oxidation of sulfides with vanadium or tungsten catalysts and chiral ligands and application to tenatoprazole and omegrazole enantiomers)

RN 113713-24-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (CA INDEX NAME)

IT 705968-86-1P, (S)-(-)-Tenatoprazole 705969-00-2P,

(R) - (+) - Tenatoprazole

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(target compound; enantioselective preparation of sulfoxides by asym. $\ensuremath{\mathsf{oxidation}}$

of sulfides with vanadium or tungsten catalysts and chiral ligands and application to tenatoprazole and omeprazole enantiomers)

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L3 ANSWER 94 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:800852 CAPLUS

DOCUMENT NUMBER: 141:314327

Process for preparation of sulfoxides, in particular TITLE:

enantiomers of tenatoprazole and its related

derivatives by enantioselective oxidation of sulfides INVENTOR(S):

Schutze, Francois; Charbit, Suzy; Cohen, Avraham;

Martinet, Frederic

PATENT ASSIGNEE(S): Negma Gild, Fr. Fr. Demande, 21 pp. SOURCE:

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	CENT	NO.			KIN	D	DATE		,	APPI	LICAT	ION I	NO.		D.	ATE	
	2852									 FR 2	2003-	3914			2	0030	328
	2852						2006								_		
	2520						2004			_	2004-						
										WO 2	2004-	FR77	8		2	0040	326
WO	2004																
	W:										BG,						
											EC,						
											JP,						
											MK,		•				
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
							•				UZ,					•	
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
		ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,
		TD,	ΤG														
EP	1608	649			A2		2005	1228		EP 2	2004-	7423	82		2	0040	326
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK
CN	1823	065			Α		2006	0823		CN 2	2004-	8000	8537		2	0040	326
JP 2006523201 IN 2005DN03962					Α		2007	0824		IN 2	2005-	DN39	62		2	0050	905
MX 2005PA10250																	
US	US 20060281782						2006	1214		US 2	2006-	5510	37		2	0060	726
	RITY APPLN. INFO.:										2003-					0030	328
										FR 2	2003-	1467	9		A 2	0031	215
										WO 2	2004-	FR77	8	1	W 2	0040	326
D 00							1 11	0 1 10	.								

OTHER SOURCE(S): MARPAT 141:314327 GT

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The invention is related to a method of preparation of sulfoxides and their basic salts, of formula A-CH2-S-B, in particular enantiomers of tenatoprazole (I) and derivs., by enantioselective oxidation of a sulfide of formula A-CH2-SO-B with an oxidation agent in the presence of a catalyst containing tungsten or of vanadium and of a chiral ligand, of formula RO-CR1R2-CR3R4-NR5R6, followed if necessary by base treatment [wherein A = substituted pyridinyl; B = benzimidazolyl, imidazopyridyl; R = H, alkyl, hetero/aryl; R1, R2, R3, R4 = independently alkyl, hetero/aryl with provisos; R5, R6 = alkyl; or NR5R6 = heterocyclyl, -N:CHAr; Ar =

substituted aryl]. The method provides high enantiomeric excess (e.e.) values (> 90%). Thus, oxidation of sulfide II with H2O2 in the presence of WO3, ligand III in THF gave (S)-(-)-I in > 99% e.e.

IT 113713-24-9, 5-Methoxy-2-[[(4-methoxy-3,5-dimethyl-2-

pyridyl)methyl]thio]imidazo[4,5-b]pyridine

RL: RCT (Reactant); RACT (Reactant or reagent)

(sulfide starting material; preparation of sulfoxides, in particular enantiomers of tenatoprazole and its related derivs., by

enantioselective oxidation of sulfides)

RN 113713-24-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (CA INDEX NAME)

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 95 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:799468 CAPLUS

DOCUMENT NUMBER: 141:320050

TITLE: Controlled-release compositions containing proton pump

inhibitors

INVENTOR(S): Nagahara, Naoki; Miyamoto, Keiko; Akiyama, Yohko

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 243 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
KIND DATE
      PATENT NO.
                                                       APPLICATION NO.
                                 ____
                                                            ______
                                  A1 20040930 WO 2004-JP3483
       WO 2004082665
                                                                                             20040316
            W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
                  CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
                  GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
                  TD, TG
                                                          CA 2004-2519208
       CA 2519208
                                    A1
                                             20040930
                                                                                              20040316
                                                          JP 2004-75037
EP 2004-720975
                                   Α
       JP 2004300149
                                             20041028
                                                                                              20040316
       EP 1607088
                                   A1
                                            20051221
                                                          EP 2004-720975
                                                                                              20040316
            R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                  IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
       US 20060177509
                                  A1 20060810
                                                             US 2005-549150 20050915
PRIORITY APPLN. INFO.:
                                                              JP 2003-72858
                                                                                         A 20030317
                                                             WO 2004-JP3483
                                                                                        W 20040316
```

AΒ It is intended to provide a controlled release composition in which the release of its active ingredient (a proton pump inhibitor) is controlled in two or more steps with different release speeds. This composition, which comprises (1) a release-controlling part A capable of controlling the release speed of the active ingredient at a definite level, and (2) a release-controlling part B capable of controlling the release speed of the active ingredient at a definite level which is lower than the release speed in the release-controlling part A, optionally together with (3) a release-controlling part C capable of controlling the release speed of the active ingredient at a definite level which is higher than the release speed in the release-controlling part B, if necessary, is characterized in that the release of the active ingredient in the release-controlling part B is first made followed by the release of the active ingredient in the release-controlling part A (in the case of having the release-controlling part C, the release of the active ingredient in the release-controlling part C is first made followed by the release of the active ingredient in the release-controlling part B). Thus, a core tablet prepared from R-lansoprazole 113, lactose 303, corn starch 50, low-substituted hydroxypropyl cellulose (L-HPC) 35 mg was layered with an outer layer material coating R-lansoprazole 33.8, hydroxypropyl Me cellulose (Metolose 65SH-4000) 116.3 mg to obtain a controlled-release tablet.

IT 113712-98-4, 5-Methoxy-2-[[(4-methoxy-3,5-dimethyl-2 pyridyl)methyl]sulfinyl]-1H-imidazo[4,5-b]pyridine 705968-86-1
 705969-00-2

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of proton pump inhibitors for controlled-release compns.)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

7

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 96 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:780561 CAPLUS

DOCUMENT NUMBER: 141:254601

TITLE: Preventive or remedy for teeth grinding containing

gastric acid inhibitors

INVENTOR(S): Miyawaki, Shouichi; Yamamoto, Teruko

PATENT ASSIGNEE(S): Eisai Co. Ltd., Japan SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	CENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE		
	WO	2004	0804	87		A1	_	2004	0923		WO 2	004-	JP93	 9		2	0040	130	
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MΖ,	NA,	ΝΙ,	
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
			ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
			BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
			TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG
	EΡ	1611	901			A1		2006	0104		EP 2	004-	7068	69		2	0040	130	
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
	US	2006	0173	045		A1		2006	0803		US 2	005-	5477	96		2	0050	906	
PRIO	RIT	APP	LN.	INFO	.:						JP 2	003-	6875	5		A 2	0030.	313	
											WO 2	004-	JP93	9	1	W 2	0040	130	

AB It is intended to provide a preventive or a remedy for teeth grinding and diseases relating thereto which contains as the active ingredient at least one member selected from among proton pump inhibitors, histamine H2 receptors and acid pump antagonists. Examples of the proton pump inhibitors include rabeprazole, omeprazole, esomeprazole, lansoprazole, pantoprazole, tenatoprazole, salts thereof and hydrates of the same. The effect of rabeprazole sodium salt tablet (Pariet) in patients with teeth grinding was examined

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preventive or remedy for teeth grinding and teeth grinding-related disease containing gastric acid inhibitors)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 97 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:780521 CAPLUS

DOCUMENT NUMBER: 141:282815

TITLE: Drug composition having active ingredient adhered at

high concentration to spherical core

INVENTOR(S): Yoneyama, Shuji; Bando, Hiroto

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 237 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	TENT				KIN	D	DATE			APPL:	-	-				ATE	
	2004				A1												
	W:						ΑU,										
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW: BW, GH, GI				ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,
	BY, KG, K					RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
	BY, KG, K ES, FI, F				GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	ΝL,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	${ m ML}$,	MR,	NE,	SN,
		TD,	ΤG														
CA	2518	780			A1		2004	0923		CA 2	004-	2518	780		2	0040	310
JP	2004	2924	42		Α		2004	1021		JP 2	004-	6645	6		2	0040	310
EP	1602	362			A1		2005	1207		EP 2	004-	7190	76		2	0040	310
	R: AT, BE, C					DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK
US	2006	0159	760		A1		2006	0720		US 2	005-	5485	04		2	0050	909
PRIORIT	Y APP	LN.	INFO	.:						JP 2	003-	6634	4	i	A 2	0030	312
									,	WO 2	004-	JP30	75	Ī	W 2	0040	310

OTHER SOURCE(S): MARPAT 141:282815

AB Granule, fine particle or tablet of excellent leaching property, comprising a drug active ingredient in high content realized by forming a layer containing drug active ingredient on core particles through a combination of a method of dispersing and adhering an active ingredient while spraying or adding a binder with a method of spraying or adding a solution or suspension wherein an active ingredient and a binder are contained so as to effect adhesion. Further, there are provided a drug composition containing such a granule, fine particle or tablet and a process

for

producing the same. Thus, original granules of crystalline cellulose were prepared by spraying a composition (R)-lansoprazole (I), crystalline cellulose, magnesium carbonate, and hydroxypropyl cellulose to crystalline cellulose. The obtained granules were further coated with a 1st coating material containing I, magnesium carbonate, sucrose, and hydroxypropyl cellulose, a 2nd coating material containing hydroxypropyl Me cellulose, talc, and titanium oxide, and then an enteric coating material containing methacrylic acid copolymer, talc, macrogol, titanium oxide, and polysorbate 80, or another enteric coating material containing different methacrylic acid copolymers, talc, and tri-Et citrate. The granules with different enteric coatings were mixed and filled in capsules.

(preparation of drug composition containing proton pump inhibitors adhered at high

concentration to spherical core)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 98 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:718538 CAPLUS

DOCUMENT NUMBER: 141:248724

TITLE: The enantiomers of tenatoprazole for therapeutic uses

INVENTOR(S): Yamashita, Setsuo; Ebina, Kengo PATENT ASSIGNEE(S): Mitsubishi Pharma Corporation, Japan

SOURCE: PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT 1	NO.			KIN	D	DATE			APP	LICAT	I NOI	.OV		D.	ATE	
WO	2004	0742	 85		A1	_	2004	0902		WO	2004-	JP208	 87		2	0040	223
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	AZ,	BA,	BB	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	KE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG	, MK,	MN,	MW,	MX,	MΖ,	NA,	NI
	RW: BW, GH, GN					LS,	MW,	MZ,	SD,	SL	, SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,
	BG, CH, C					DE,	DK,	EE,	ES,	FΙ	, FR,	GB,	GR,	HU,	ΙE,	IT,	LU,
	BG, CH, CY MC, NL, PT					SE,	SI,	SK,	TR,	BF	, BJ,	CF,	CG,	CI,	CM,	GΑ,	GN,
		GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG								
CA	2512	928			A1		2004	0902		CA	2004-	25129	928		2	0040	223
CN	1753	893			A		2006	0329		CN	2004-	8000	4946		2	0040	223
JP	2006	5192	24		${f T}$		2006	0824		JΡ	2006-	50268	82		2	0040	223
US	2006	0122	216		A1		2006	0608		US	2005-	54648	85		2	0051	007
PRIORIT	Y APP	.:						JP	2003-	4633	5	Ž	A 2	0030	224		
										WO	2004-	JP208	87	I	w 2	0040	223

AB This invention relates to (+)- and (-)- enantiomers of tenatoprazole. The compds. and pharmaceutical compns. are useful as antiulcer agents. Thus, tablets contained (-)-tenatoprazole 30.0, lactose 40.0, aluminum hydroxide 17.5, hydroxypropyl cellulose 8.0, talc 4.5, TiO2 5.0, Mg stearate 20, and usual excipients 160.0 mg.

IT 705969-00-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

((+)-tenatoprazole; enantiomers of tenatoprazole for therapeutic uses)

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 113712-98-4, Racemic-Tenatoprazole

RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)

(enantiomers of tenatoprazole for therapeutic uses)

RN 113712-98-4 CAPLUS

IT 705968-86-1, (-)-Tenatoprazole

RL: FMU (Formation, unclassified); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses) (enantiomers of tenatoprazole for therapeutic uses)

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 113713-24-9

RL: RCT (Reactant); RACT (Reactant or reagent) (enantiomers of tenatoprazole for therapeutic uses)

RN 113713-24-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \text{N} & \text{N} \\ \hline & \text{N} & \text{N} \\ \hline & \text{NH} & \text{S-CH}_2 \\ \hline & \text{N} \\ \end{array}$$

TT 705968-89-4, (-)-Tenatoprazole sodium salt 705968-92-9, (-)-Tenatoprazole potassium salt 705968-95-2, (-)-Tenatoprazole lithium salt 705968-98-5, (-)-Tenatoprazole magnesium salt 705968-99-6, (-)-Tenatoprazole calcium salt 705969-00-2D, magnesium complex 749250-96-2, (+)-Tenatoprazole sodium salt 749250-97-3, (+)-Tenatoprazole potassium salt 749250-98-4, (+)-Tenatoprazole lithium salt 749250-99-5, (+)-Tenatoprazole calcium salt

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (enantiomers of tenatoprazole for therapeutic uses)

RN 705968-89-4 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

RN 705968-92-9 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

K

RN 705968-95-2 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, lithium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

● Li

RN 705968-98-5 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, magnesium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

●1/2 Mg

RN 705968-99-6 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, calcium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

●1/2 Ca

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 749250-96-2 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Na

RN 749250-97-3 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

K

RN 749250-98-4 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, lithium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

● Li

RN 749250-99-5 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, calcium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

●1/2 Ca

REFERENCE COUNT:

39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 99 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:718322 CAPLUS

DOCUMENT NUMBER: 141:230698

TITLE: Omeprazole antacid complex-immediate release for rapid

and sustained suppression of gastric acid

INVENTOR(S):
Hepburn, Bonnie; Goldlust, Barry

PATENT ASSIGNEE(S): Santarus, Inc., USA SOURCE: PCT Int. Appl., 121 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APPL	ICAT		DATE					
	2004				2004 2005		,	WO 2	004-		20040220							
		ΑE,	AG,	AL,	AM,	ΑT,	AU, DE,		•	•								
		GE,	GH,	GM,	HR,	HU,	ID, LV,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	
		MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,									
	GQ, GW, ML, 2517005			A1		2004	0902	1				20040220 20040220						
ы		AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,		
	IE, SI, LT, JP 2006518751						2006	0817	,	JP 2	006-	·	20040220					
AU									MX 2005-PA8804 AU 2005-204242 US 2003-448627P						20050825			
PRIORII	I APP	LIN.	INFO	. :						AU 2	004-	2130	46		A3 2	0040	220	
										WO 2 US 2					-	0040 0040		

AB The present invention is directed to methods, kits, combinations, and compns. for treating, preventing or reducing the risk of developing a gastrointestinal disorder or disease, or the symptoms associated with, or related to a gastrointestinal disorder or disease in a subject in need thereof. In one aspect, the present invention provides a pharmaceutical composition comprising a proton pump inhibiting agent and a buffering agent for oral administration and ingestion by a subject. Upon administration, the composition contacts the gastric fluid of the stomach and increases the gastric fluid pH of the stomach to a pH that substantially prevents or inhibits acid degradation of the proton pump inhibiting agent in the gastric fluid and allows a measurable serum concentration of the proton pump inhibiting agent to be

absorbed into the blood serum of the subject. Omeprazole powder plus a chewable tablet of NaHCO3 and CaCO3 resulted in more rapid absorption in humans when compared to a marketed omeprazole delayed-release formulation.

113712-98-4, Tenatoprazole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(omeprazole antacid complex-immediate release for rapid and sustained suppression of gastric acid)

RN 113712-98-4 CAPLUS

ΙT

L3 ANSWER 100 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:609743 CAPLUS

DOCUMENT NUMBER: 141:145707

TITLE: Method for the administration of acid-labile drugs

using basic salts with calcium, magnesium or aluminum

INVENTOR(S): Sharma, Virender K.; Howden, Colin W.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 8 pp., Cont.-in-part of U.S.

Ser. No. 824,847.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
					_		
	US 20040146554	A1	20040729	US 2004-755656		20040112	
	US 20020146451	A1	20021010	US 2001-824847		20010404	
PRIO	RITY APPLN. INFO.:			US 2000-218509P	Р	20000715	
				US 2001-824847	Α2	20010404	

AB A method for the formulation and delivery for administration of acid-labile drugs to human beings and other animals achieved by mixing the active pharmaceutical compound with a basic salt as one of calcium, magnesium and aluminum in a solution or suspension of any kind, where the basic salt solution or suspension protects the pharmaceutical compound from the adverse effects of gastric acid by neutralizing gastric acid. When calcium is used, it has the advantage of no obvious contraindications and is generally usable by all patients, especially those patients who have diseases

in which sodium is contraindicated.

IT 113712-98-4, Tenatoprazole 705968-86-1,

(S)-Tenatoprazole

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(as acid-labile drug; acid-labile drug formulations as basic salts with calcium, magnesium or aluminum)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L3 ANSWER 101 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:515505 CAPLUS

DOCUMENT NUMBER: 141:71546

TITLE: Process for preparing optically pure

2-(2-pyridylmethylsulfinyl)-1H-benzimidazole and 2-(2-pyridylmethylsulfinyl)-1H-imidazo[4,5-b]pyridine

ADDITCATION NO

חתעם

as proton pump inhibitors (PPI)

INVENTOR(S): Kohl, Bernhard; Mueller, Bernd; Weingart, Ralf Steffen

PATENT ASSIGNEE(S): Altana Pharma Ag, Germany SOURCE: PCT Int. Appl., 20 pp.

CODEN: PIXXD2

שתעט טאבת

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DATENT NO

ŀ	PAT	ENI I	NO.			KIND DATE				APP	LICAT		DATE						
	WO.	2004	0528	 82		A1 20040624					wo	2003-		20031203					
		W: AE, AL, AU, BA, BR, CA, CN,		CO,	DΖ	, EC,	EG,	GE,	HR,	ID,	IL,	IN,							
			IS,	JP,	KR,	LT,	LV,	MA,	MK,	MX,	ИО	NZ,	PH,	PL,	SG,	TN,	UA,	US,	
				YU,															
		RW:										i, AT,							
						FΙ,	FR,	GB,	GR,	HU,	ΙE	, IT,	LU,	MC,	NL,	PT,	RO,	SE,	
				SK,															
(CA	2507	807			A1		2004	0624		CA	2003-	2507		2	0031	203		
I	UA	2003	2899	48		A1	2004	0630		AU	2003-	2899		20031203					
H	ΞP	1578742				A1	2005	0928		EΡ	2003-	7822		20031203					
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	I, IT,	LI,	LU,	ΝL,	SE,	MC,	PT,	
								RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	HU,	SK		
Ε	3R	2003	0170	05		А	2005						20031203						
	-	1717				А	2006	0104					20031203						
Ċ	JP 2006516261						T 20060629					2005-		20031203					
2	ZΑ	2005	0035	43		А	2006	0830		ZA	2005-		20050504						
Ţ	JS	2005	0288.	334		A1	2005	1229		US	2005-		20050527						
ľ	ΧN	2005	PA05	762		А		2005	0816		MX	2005-	PA57	62		20050530			
1	10	2005	0030	99		А		2005	0624		ИО	2005-	3099			2	0050	624	
-	ΙN	2005	0 0 MM	674		A	A 20051021				IN	2005-		20050627					
PRIOR	ΙΤΥ	APP:	LN.	INFO	.:						EΡ	2002-	2727	3		A 2	0021	206	
											DE	2003-	1034	0255		A 2	0030	829	
											WO	2003-	EP13	605	1	W 2	0031	203	

Described is a process for preparing optically pure PPI having a sulfinyl structure in enantiomerically pure or enantiomerically enriched form by oxidation of the corresponding sulfides in the presence of a chiral zirconium or hafnium complex. Thus, 20.2 g 5-difluoromethoxy-2-[(3,4-dimethoxy-2-pyridinyl)methylthio]-1H-benzimidazole together with 17.9 g di-Et (+)-tartrate, 13.4 g zirconium(IV) isopropoxide/isopropanol complex and 0.1 mL H2O were suspended in 100 mL Me iso-Bu ketone and heated at 40° for one hour to give an almost clear solution After cooling to room temperature, 4.1 mL N-ethyldiisopropylamine was added, followed by slowly metering 11 mL cumene hydroperoxide, and the mixture was stirred at room temperature until the oxidation process to give, after workup,

(-)-pantoprazole as

a beige powder of m.p. 145° (decomposition) and an optical purity of >95%. After recrystn. from isopropanol, a clear crystal of m.p. 147-149° (decomposition) with an optical rotation of a D20 = -140° (c = 0.5, MeOH) was obtained.

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparing optically pure 2-(2-pyridyolmethylsulfinyl)-1H-benzimidazole and -1H-imidazo[4,5-b]pyridine as proton pump inhibitors by oxidation of sulfides in the presence of a chiral zirconium or hafnium complex)

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L3 ANSWER 102 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:492326 CAPLUS

DOCUMENT NUMBER: 141:54339

TITLE: Tenatoprazole enantiomer with improved pharmacokinetic

behavior, and its therapeutic application in the

treatment of digestive pathologies

INVENTOR(S): Schutze, Francois; Charbit, Suzy; Ficheux, Herve;

Homerin, Michel; Taccoen, Alain; Cohen, Avraham

PATENT ASSIGNEE(S): Negma Gild, Fr. SOURCE: Fr. Demande, 15 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.												DATE					
			A1 20040618 B1 20060728				FR 2	002-	1594									
		2509899				A1 20040722				CA 2	003-	2509		20031216				
WO	20040	2004060891				A1 20040722				WO 2	003-	FR37		20031216				
_	W:							AZ,										
								DK,										
								IL,										
								MA,										
								RO,										
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
								CM,										ΤG
AU	20033	2003300627				A1 20040729					AU 2003-300627					20031216		
EP	15726	1572692			A1 20050914				EP 2003-814481						2	20031216		
	R:							FR,									PT,	
								MK,										
BR	20030	0173.	28		A		2005	1108	BR 2003-17328						20031216			
CN	17262	1726214					2006	0125	CN 2003-80106267 JP 2004-564280 RU 2005-122465						20031216			
JP	20065	5132.	30		T		2006	0420		JP 2	004-	5642		20031216				
RU	23100	652			C2		2007	1120		RU 2	005-	1224		20031216				
	54066 20050													20031216				
								0602 0425							20040913			
	70340 2005I				B2			0105							20050600			
								0704								0050		
	20050 20051		110 110		A			0308		MV 2	005-	2796 PA64	10		2	0050	615	
	20051							0831										
PRIORIT					Λı		2000	0031							20060201 A 20021216			
11/101/11	T WILL	□ 1.A ◆	T111 ()	• •								FR37						
										-		5074	-		A3 2		-	
СТ										20 2		O , 1			2			

AΒ The invention relates to the (-)-enantiomer of tenatoprazole, i.e., (-)-I, or (-)-5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2pyridyl)methyl]sulfinyl]imidazo[4,5-b]pyridine. This enantiomer has improved pharmacokinetic properties relative to racemic I, allowing a posol. of only one dose of drug per day in indicated usages. (-)-I is applicable to treatment of digestive pathologies. Claims cover (-)-I and salts, preparation of (-)-I by chiral chromatog. of the racemate, compns. containing (-)-I and salts, particularly the Na, K, Li, Mg, and Ca salts, and the use of these compds. for treatment of a variety of specific conditions, or for inhibition of acid secretion. For instance, separation of 2 g (\pm) -I on a 265+110 mm ChiralPak column containing an amylose $tris[(S)-\alpha-methylbenzylcarbamate]$ stationary phase at ambient temperature gave (-)-I. Pharmacokinetic studies in Caucasians show that a mutation of cytochrome 2C19 gives rise to fast and slow metabolizers of I, which leads to plasma accumulation of (+)-I in CYP2C19*2/*2-homozygous slow metabolizers, and a higher proportion of (-)-I in CYP2C19*1/*1-homozygous fast metabolizers. It appears that (+)-I is metabolized predominantly by CYP2C19, whereas (-)-I is metabolized by 2 routes, CYP2C19 and CYP3A4. Thus, therapy with (-)-I offers the advantages of reduced variability between patients, better utilization, longer mean residence time, and reduced potential for drug interaction by compensation for potential CYP2C19 blockage. (-)-I has a plasmatic half-life of 10-12 h at 20-80 mg doses, whereas (\pm) -I has a half-life of 7 h at 20 mg and 9 h at 80 mg. 113712-98-4, (±)-Tenatoprazole

Ι

RL: PEP (Physical, engineering or chemical process); PKT (Pharmacokinetics); PYP (Physical process); BIOL (Biological study); PROC (Process)

(chromatog. resolution; preparation of tenatoprazole enantiomer with improved

pharmacokinetic behavior, for treatment of digestive disorders)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

TT 705968-86-1P 705968-89-4P, (-)-Tenatoprazole sodium salt 705968-92-9P, (-)-Tenatoprazole potassium salt 705968-95-2P, (-)-Tenatoprazole lithium salt 705968-98-5P

, (-)-Tenatoprazole magnesium salt 705968-99-6P,

(-)-Tenatoprazole calcium salt

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tenatoprazole enantiomer with improved pharmacokinetic behavior, for treatment of digestive disorders)

RN 705968-86-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 705968-89-4 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

RN 705968-92-9 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

• K

RN 705968-95-2 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, lithium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

● Li

RN 705968-98-5 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, magnesium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

●1/2 Mg

RN 705968-99-6 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, calcium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

●1/2 Ca

RL: PKT (Pharmacokinetics); BIOL (Biological study) (preparation of tenatoprazole enantiomer with improved pharmacokinetic behavior, for treatment of digestive disorders)

RN 705969-00-2 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 103 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:453656 CAPLUS

DOCUMENT NUMBER: 141:116452

TITLE: Chemistry of Covalent Inhibition of the Gastric (H+,

K+)-ATPase by Proton Pump Inhibitors

AUTHOR(S): Shin, Jai Moo; Cho, Young Moon; Sachs, George

CORPORATE SOURCE: Department of Physiology and Medicine, University of

California, Los Angeles, CA, 90073, USA

SOURCE: Journal of the American Chemical Society (2004),

126(25), 7800-7811

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:116452

Proton pump inhibitors (PPIs), drugs that are widely used for treatment of acid related diseases, are either substituted pyridylmethylsulfinyl benzimidazole or imidazopyridine derivs. They are all prodrugs that inhibit the acid-secreting gastric (H+, K+)-ATPase by acid activation to reactive thiophiles that form disulfide bonds with one or more cysteines accessible from the exoplasmic surface of the enzyme. This unique acid-catalysis mechanism had been ascribed to the nucleophilicity of the pyridine ring. However, the data obtained here show that their conversion to the reactive cationic thiophilic sulfenic acid or sulfenamide depends mainly not on pyridine protonation but on a second protonation of the imidazole component that increases the electrophilicity of the C-2 position on the imidazole. This protonation results in reaction of the C-2 with the unprotonated fraction of the pyridine ring to form the reactive derivs. The relevant PPI pKa's were determined by UV spectroscopy of the benzimidazole or imidazopyridine sulfinylmethyl moieties at different medium pH. Synthesis of a relatively acid stable analog, N1-Me lansoprazole, allowed direct determination of both pKa values of this intact

allowing calcn. of the two pKa values for all the PPIs. These values predict their relative acid stability and thus the rate of reaction with cysteines of the active proton pump at the pH of the secreting parietal cell. The PPI accumulates in the secretory canaliculus of the parietal cell due to pyridine protonation then binds to the pump and is activated by the second protonation on the surface of the protein to allow disulfide formation.

IT 721924-07-8P

PPI

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(chemical of covalent inhibition of gastric (H+, K+)-ATP as by proton pump inhibitors)

RN 721924-07-8 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1-methyl- (CA INDEX NAME)

IT 113712-98-4P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); RACT (Reactant or reagent)
 (chemical of covalent inhibition of gastric (H+, K+)-ATPase by proton pump
 inhibitors)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 104 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:378286 CAPLUS

DOCUMENT NUMBER: 141:360444

AUTHOR(S):

TITLE: Tenatoprazole, a novel proton pump inhibitor with a

prolonged plasma half-life: effects on intragastric pH and comparison with esomeprazole in healthy volunteers Galmiche, J. P.; des Varannes, S. Bruley; Ducrotte,

P.; Sacher-Huvelin, S.; Vavasseur, F.; Taccoen, A.;

Fiorentini, P.; Homerin, M.

CORPORATE SOURCE: CIC-INSERM, CHU de Nantes, Nantes, Fr.

SOURCE: Alimentary Pharmacology and Therapeutics (2004),

19(6), 655-662

CODEN: APTHEN; ISSN: 0269-2813

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

Background: Proton pump inhibitors control gastric acidity better during AB the day than at night, when nocturnal acid breakthrough can occur. Tenatoprazole is a novel proton pump inhibitor with a seven-fold longer plasma half-life. Aim: To compare the effects of tenatoprazole 20 mg (T20), tenatoprazole 40~mg (T40) and esomeprazole 40~mg (E40) on intragastric acidity in healthy volunteers. Methods: This randomized, three-period, cross-over study enrolled 18 Helicobacter pylori-neq. volunteers, who received E40, T20 and T40 once daily for 7 days with a 14-day washout between periods. Twenty-four-hour gastric pH monitoring was performed on day 7. Serum gastrin was assessed on day 8. Results: T40 induced a more potent acid inhibition than T20 (24-h median pH: 4.6 vs. 4.0, P < 0.01; daytime: 4.5 vs. 3.9, P < 0.01; night-time: 4.7 vs. 4.1, P < 0.05). T40 was more potent than E40 (24-h median pH: 4.6 vs. 4.2, P < 0.05; night-time: 4.7 vs. 3.6, P < 0.01); the pH > 4 holding time was higher during the night for T40 than for E40: 64.3% vs. 46.8%, P < 0.01; the nocturnal acid breakthrough duration was significantly shorter for T40 than for E40. No significant gastrin increase was observed and all drugs were well tolerated. Conclusion: T40 is significantly more potent than T20 and E40 during the night. The therapeutic relevance of this pharmacol. advantage deserves further study.

IT 113712-98-4, Tenatoprazole

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (tenatoprazole with prolonged plasma half-life and esomeprazole were well tolerated, highly effective in controlling intragastric pH with no significant gastrin increase, but T40 was more potent than T20, E40 during night in healthy human)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 105 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:354765 CAPLUS

DOCUMENT NUMBER: 140:380603

TITLE: Controlled release preparation containing proton pump

inhibitors

INVENTOR(S): Akiyama, Yohko; Kurasawa, Takashi; Bando, Hiroto;

Nagahara, Naoki

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 371 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					D	DATE			APF	LICAT	ION	NO.		Γ	DATE	
	2004		20		A2					WO	2003-	JP13	155		2	20031	015
	₩:	CO, GH, LS,	CR, GM, LT,	CU, HR, LU,	CZ, HU, LV,	DE, ID, MA,	DK, IL, MD,	DM, IN, MG,	DZ, IS, MK,	EC JP MN	B, BG, C, EE, P, KE, I, MW, E, SG,	EG, KG, MX,	ES, KR, MZ,	FI, KZ, NI,	GB, LC, NO,	GD, LK, NZ,	GE, LR, OM,
	R₩:	TR, GH, KG, FI,	TT, GM, KZ, FR,	TZ, KE, MD, GB,	UA, LS, RU, GR,	UG, MW, TJ, HU,	US, MZ, TM, IE,	UZ, SD, AT, IT,	VC, SL, BE, LU,	VN SZ BG MC	I, YU, I, TZ, G, CH, C, NL,	ZA, UG, CY, PT,	ZM, ZM, CZ, RO,	ZW, ZW, DE, SE,	AM, DK, SI,	AZ, EE, SK,	BY, ES, TR,
JP		574 2720 2924	98 27	·	A1 A1 A	·	2004 2004 2004	0429 0504 1021	·	CA AU JP	2003- 2003- 2003- 2003- 2003-	2499 2720 3549	574 98 00	·	2	20031 20031 20031	015 015 015
		AT, IE,	BE, SI,	CH, LT,	DE, LV,	DK, FI,	ES, RO,	FR, MK,	GB, CY,	GR AL	2003- R, IT, J, TR, 2003-	LI, BG,	LU, CZ,	NL, EE,	SE, HU,	MC, SK	PT,
CN NZ NZ IN	1713; 5525; 5393; 2005; 2006;	897 92 53 KN00	604		A A A A		2005 2005 2007 2007 2006 2006	1228 0629 0727 0616		CN NZ NZ IN	2003- 2003- 1992- 2003- 2005- 2005-	8010 5525 5393 KN60	3935 53 4		2	20031 20031 20031	015 015 015 408
MX	2005 2005	PA03 0024	902 00		А		2005	0622		MX NO	2005- 2005- 2002- 2003- 2003-	PA39 2400 3018	02 76		2 2 A 2	20050 20050 20021	412 513 016
OTHER SO	JIIB(E	(8)•			MZD.		140•	3806		WO	2003-	JP13	155	,	W 2	20031	015

OTHER SOURCE(S): MARPAT 140:380603

GΙ

AB A controlled release preparation wherein the release of active ingredient is controlled, which releases an active ingredient for an extended period of time by staying or slowly migrating in the gastrointestinal tract, is provided by means such as capsulating a tablet, granule or fine granule wherein the release of active ingredient is controlled and a gel-forming polymer. Said tablet, granule or fine granule has a release-controlled coating-layer formed on a core particle containing an active ingredient. Many compds. such as I were prepared and formulations given, e.g., granules containing sucrose-starch spheres, R-lansoprazole, Mg carbonate, purified sucrose, corn starch, low-substituted hydroxypropyl cellulose, and hydroxpropyl cellulose.

IT 113712-98-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(controlled release preparation containing proton pump inhibitors)

RN 113712-98-4 CAPLUS

L3 ANSWER 106 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:329905 CAPLUS

DOCUMENT NUMBER: 140:344896

TITLE: Pharmaceutical composition comprising tenatoprazole

and an anti-inflammatory drug

INVENTOR(S): Schutze, Francois; Charbit, Suzy; Ficheux, Herve;

Homerin, Michel; Taccoen, Alain; Inaba, Yoshio

PATENT ASSIGNEE(S): Negma Gild, Fr.; Mitsubishi Pharma Corporation

SOURCE: Fr. Demande, 15 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA.	PATENT NO.					D	DATE				ICAT					ATE	
FR	2845	917			A1			0423			2002-					0021	021
FR	2845	917			В1		2006	0707									
CA	2503	211			A1		2004	0506		CA 2	2003-	2503	211		2	0031	021
WO	2004	0372	54		A1		2004	0506		WO 2	2003-	FR31.	20		2	0031	021
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	ВG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NΙ,	NO,	NZ,
		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ΤJ,	TM,
		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FΙ,	FR,	GB,	GR,	HU,	IE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
							CM,										
AU	2003	2854	24		A1		2004	0513		AU 2	2003-	2854.	24		2	0031	021
	1553									EP 2	2003-	7784.	25		2	0031	021
EP	1553	942			В1		2006	0524									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
	2003							0823		BR 2	2003-	1545	5		2	0031	021
JP	2006	5063	76		T											0031	021
CN	1744	897			Α		2006									0031	021
ΔΤ	3269	68			т		2006	0615		AT 2	2003-	7784.	25		2	0031	
PT	1553	942			${f T}$		2006										
	2265	594			Т3		2007	0216		ES 2	2003-	7784.	25		2	0031	021
US	2006	0287	284		A1		2006	1221		US 2	2006-	5320	41		2	0060	623
RIORIT	Y APP	LN.	INFO	.:							2002-					0021	021
											2003-					0031	021
_				-									_				-

- AB A pharmaceutical composition comprises a combination of tenatoprazole and one or more NSAID and the inhibitors of cyclooxygenase-2 inhibitors for the treatment of the painful and inflammatory symptoms. A tablet contained tenatoprazole 20, diclofenac 100, and excipients q.s. 300 mg. Efficacy of the tablet in the treatment of patients with inflammation and pain is shown.
- IT 113712-98-4, Tenatoprazole 335299-59-7 335299-60-0 884304-68-1 884304-69-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical composition comprising tenatoprazole and anti-inflammatory drugs)

RN 113712-98-4 CAPLUS

RN 335299-59-7 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 335299-60-0 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt (9CI) (CA INDEX NAME)

K

RN 884304-68-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, magnesium salt (2:1) (CA INDEX NAME)

●1/2 Mg

RN 884304-69-2 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-

pyridinyl)methyl]sulfinyl]-, calcium salt (9CI) (CA INDEX NAME)

●1/2 Ca

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 107 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:329904 CAPLUS

DOCUMENT NUMBER: 140:344895

TITLE: Pharmaceutical composition comprising tenatoprazole

and an H2histamine receptor antagonist

INVENTOR(S): Schutze, Francois; Charbit, Suzy; Ficheux, Herve;

Homerin, Michel; Taccoen, Alain; Inaba, Yoshio

PATENT ASSIGNEE(S): Negma Gild, Fr.; Mitsubishi Pharma Corporation

SOURCE: Fr. Demande, 13 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT		KIN:		DATE			APP	LICAT	ION :	NO.		D	ATE			
	2845	916			A1					FR	2002-	 1311	4		2	0021	021
	2845											0 = 0 0					
	2503										2003-						
WC	2004																
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB	, BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	EG,	ES,	FΙ,	GB,	GD,	GE,
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP	, KE,	KG,	KP,	KR,	KΖ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK	, MN,	MW,	MX,	MΖ,	ΝI,	NO,	NZ,
		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD	, SE,	SG,	SK,	SL,	SY,	ТJ,	TM,
		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC	, VN,	YU,	ZA,	ZM,	ZW		
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KZ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	ВG	, CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FΙ,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC	, NL,	PT,	RO,	SE,	SI,	SK,	TR,
											, GW,						
AU	2003	2854	28		A1		2004	0513		AU	2003-	2854	28		2	0031	021
EF	1553	944			A1		2005	0720		EΡ	2003-	7784	29		2	0031	021
EF	1553	944			В1		2008	0227									
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	HU,	SK	
BF	2003																021
	2006																
	1 1744	896			А						2003-						
ΑT	3872	01			Т		2008	0315		ΑT	2003-	7784	29		2	0031	021
	US 20060241136 RITY APPLN. INFO.:							0			2002-					0021	
											2003-		_			0031	
		_			_			_	_	-			_				·

- AB A new pharmaceutical composition for the treatment of gastric hyperacidity comprises tenatoprazole and one or more antagonists of H2-histamine receptors such as cimetidine, ranitidine, famotidine, and nizatidine. The composition is used for the treatment of the gastric and duodenal ulcers, and the symptoms and lesions of the gastro-esophagus reflux. A tablet contained tenatoprazole 20, ranitidine 200, and excipients q.s. 300 mg. Efficacy of the tablet in the treatment of patients with gastro-esophagus reflux is shown.
- IT 113712-98-4, Tenatoprazole 335299-59-7 335299-60-0 884304-68-1 884304-69-2
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical composition comprising tenatoprazole and ${\tt H2-histamine}$ receptor antagonist)

RN 113712-98-4 CAPLUS

RN 335299-59-7 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 335299-60-0 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt (9CI) (CA INDEX NAME)

K

RN 884304-68-1 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, magnesium salt (2:1) (CA INDEX NAME)

●1/2 Mg

RN 884304-69-2 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-

pyridinyl)methyl]sulfinyl]-, calcium salt (9CI) (CA INDEX NAME)

●1/2 Ca

3

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 108 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:329903 CAPLUS

DOCUMENT NUMBER: 140:315073

TITLE: Use of tenatoprazole for the treatment of the

gastroesophageal reflux

INVENTOR(S): Schutze, Francois; Charbit, Suzy; Ficheux, Herve;

Homerin, Michel; Taccoen, Alain; Inaba, Yoshio

PATENT ASSIGNEE(S): Negma Gild, Fr.; Mitsubishi Pharma Corporation

SOURCE: Fr. Demande, 21 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIN	D	DATE								D	ATE	
		2845 2845				A1 B1		2004 2006				2002-				2	0021	021
											$C \Delta$	2003-	2503	212		21	nn31	021
												2003 . 2003-1						
	WO																	
		VV I	•	•	•	•				•		, BG,						
												, EE,						
												, KE,						
				,	,	,	,	,	,	,		, MN,	,				,	,
												, SE,					ТJ,	TM,
												, VN,						
		RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG	, СН,	CY,	CZ,	DE,	DK,	EE,	ES,
			FΙ,	FR,	GB,	GR,	HU,	IE,	ΙΤ,	LU,	MC	, NL,	PT,	RO,	SE,	SI,	SK,	TR,
			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ	, GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG
	ΑU	2003	2854	26		A1		2004	0513		AU .	2003-	2854	26		2	0031	021
	ΕP	1553	943			A1		2005	0720		EP .	2003-	7784.	27		2	0031	021
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	TR,	BG,	CZ,	EE,	HU,	SK	·
	BR	2003	0154	58	·	A	·	2005	0823	•	BR .	2003-:	1545	8	,	2	0031	021
												2004-						
	CN	1753	674			Α		2006	0329		CN	2003-	8010	 7199		21	0031	021
												2006-						
PRIO		Y APP				111		200,	0022			2002-1						
11/10		T 77T T	TT 1 4	T111 ()	• •							2002 . 2003-1					0021	
7\ D	The		~~+ :	an	~ l ~+	~ + ·		2011	+ b o w :		-	12007-	_					

AB The invention relates to a new therapeutic indication of tenatoprazole. Tenatoprazole, like its salts, can be used in the manufacture of a drug for the treatment of the atypical symptoms of gastroesophageal reflux, Gastrointestinal bleedings, and dyspepsias.

IT 113712-98-4, Tenatoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(use of tenatoprazole for treatment of gastroesophageal reflux)

RN 113712-98-4 CAPLUS

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 109 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:100820 CAPLUS

DOCUMENT NUMBER: 140:163865

TITLE: Preparation of nitrosated

(pyridylmethylsulfinyl)benzimidazolecarboxylate

derivatives as proton pump inhibitors

Fang, Xinqin; Garvey, David S.; Letts, L. Gordon INVENTOR(S):

PATENT ASSIGNEE(S):

Nitromed, Inc., USA U.S. Pat. Appl. Publ., 47 pp. SOURCE:

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	CENT 1	NO.			KIN						LICAT					ATE	
	US	2004	0024	 014					 0205			 2003-					0030	
	US	7211	590			В2		2007	0501									
	CA	2493	618			A1		2004	0212		CA 2	2003-	2493	618		2	0030	801
		2004										2003-					0030	801
	WO	2004	0126	59		А3		2004	1007									
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	ΒA,	ВВ	, BG,	BR,	BY,	BZ,	CA,	CH,	CN,
												, EE,						
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	, KG,	KP,	KR,	KZ,	LC,	LK,	LR,
												, MW,						
							,		,			, SG,			,		,	,
												, YU,				- '	,	,
		RW:				•						, TZ,		•		AM,	AZ,	BY,
												, CH,						
			FΙ,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	, NL,	PT,	RO,	SE,	SI,	SK,	TR,
												, GW,						
	ΑU	2003	•	•	•							2003–				•		
												2003-						
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	HU,	SK	·
	JР	2005										2004-						
												2007-						
PRIO		APP:						_ 0 0				2002-						
												2003-						
												2003-						
0.00	D 00		<i>(</i> 0)			1 (T D)		1 10	1 6 0 0			_ 0 0 0	~~~					001

OTHER SOURCE(S): MARPAT 140:163865

GΙ

Title compds. I (12 addnl. Markush structures), [wherein R1 = H, alkoxy, AΒ alkyl, alkylthio; R2 = H, halogen, (halo)alkoxy, (alkoxy)alkyl, alkylthio, amino, or R2 and R3 taken together with the carbon atoms to which they are attached form a cycloalkyl ring, aryl, or heterocyclic ring; R3, R11 = independently H, alkoxy, alkyl, alkylthio, or R3 and R11 taken together with the carbon chain to which they are attached form cycloalkyl ring, aryl, or heterocyclic ring; R10 = H or R10 and R1 taken together with the carbon chain to which they are attached form cycloalkyl ring; A = SOn, n = 0-2; W1 = CH, N, amino-substituted carbon; W2 = (un)substituted (aza) benzimidazole, 1-phenylimidazolyl, 1-(2-pyridinyl) imidazolyl, thieno[3,4-d]imidazolyl; and pharmaceutically acceptable salts thereof], were prepared as proton pump inhibitors. For example, reaction of lansoprazole with 2-(nitrooxy)ethyl chloroformate in the presence of NaH in THF at 0 °C gave II in 62%. Thus, I and their pharmaceutical compns. are useful as proton pump inhibitors, that donate, transfer or release nitric oxide, stimulate endogenous synthesis of nitric oxide, elevate endogenous levels of endothelium-derived relaxing factor or are the substrate for nitric oxide synthase. The invention also also provide for novel kits comprising at least one nitrosated proton pump inhibitor compound, and, optionally, at least one nitric oxide donor and/or at least one therapeutic agent. Furthermore, I and their pharmaceutical compns. are also useful for the treatment of gastrointestinal disorders; facilitating ulcer healing; decreasing the recurrence of ulcers; improving gastroprotective properties, anti-Helicobacter pylori properties or antacid properties of proton pump inhibitors; decreasing or reducing the gastrointestinal toxicity associated with the use of nonsteroidal antiinflammatory compds.; and treating bacterial infections and/or viral infections (no data).

IT 113712-98-4DP, Tenatoprazole, nitrosated derivs.
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use): BIOL (Biological study): PREP (Preparation): USES

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nitrosated (pyridylmethylsulfinyl)benzimidazolecarboxylate derivs. as proton pump inhibitors)

RN 113712-98-4 CAPLUS

REFERENCE COUNT:

109 THERE ARE 109 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L3 ANSWER 110 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:1006959 CAPLUS

DOCUMENT NUMBER: 140:42180

TITLE: Preparation of nitrogenous heterocycle prodrugs having

N-(2-acyloxyethyl)-N-methylcarbamoyl groups

INVENTOR(S): Kamiyama, Keiji; Banno, Hiroshi; Sato, Fumihiko;

Hasuoka, Atsushi

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

P	PATENT NO.					KIN)	DATE			APP	LICAT	ION I	NO.		D.	ATE	
W	0 2	2003	10642	 29		A1	_	2003	1224		wo	2003-	 JP75	 45		2	0030	513
		W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	AZ,	BA,	BB	, BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	, KG,	KR,	KΖ,	LC,	LK,	LR,	LS,
			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW	, MX,	MΖ,	NΙ,	NO,	NΖ,	OM,	PH,
			PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK	, SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
			UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM	, ZW						
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	ВG	, СН,	CY,	CZ,	DE,	DK,	EE,	ES,
			FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC	, NL,	PT,	RO,	SE,	SI,	SK,	TR,
			BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ	, GW,	ML,	MR,	NE,	SN,	TD,	TG
С	A 2	24894	470			A1		2003	1224		CA	2003-	2489	470		2	0030	613
A	U 2	20032	2423	38		A1		2003	1231		AU	2003-	2423	88		2	0030	613
J	P 2	20043	3074	57		Α		2004	1104		JΡ	2003-	1693	8 0		2	0030	613
E	P 1	15148	370			A1		2005	0316		ΕP	2003-	7334.	25		2	0030	613
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	HU,	SK	
С	N I	16783	315			A		2005	1005		CN	2003-	8188	95		2	0030	613
Z	A 2	20050	20000	90		Α		2006	0726		ZA	2005-	90			2	0050	105
U	S 2	20060	02933	371		A1		2006	1228		US	2005-	5178	47		2	0050	624
PRIORI	ΤY	APPI	_N. :	INFO	.:						JΡ	2002-	1750	86	Ž	A 2	0020	614
											JΡ	2003-	4108	5	Ž	A 2	0030	219
											WO	2003-	JP75	45	Ţ	W 2	0030	613
0.00	~ ~ -		(0)					1 10	4010	^								

OTHER SOURCE(S): MARPAT 140:42180

GΙ

$$\begin{array}{c} x^2 \\ y - D^2 \stackrel{||}{\longrightarrow} D^1 - W - N \\ R \end{array}$$

AB Disclosed is a compound having a group represented by the formula (I) [X1, X2 = 0, S; W = (un)substituted bivalent hydrocarbon chain, -W1-Z-W2-; wherein W1, W2 = bivalent hydrocarbon chain, a bond; Z = (un)substituted bivalent hydrocarbon ring or heterocyclic ring, O, S, SO, SO2, (un)substituted NH; provided that when Z = 0, S, SO, SO2, or (un)substituted NH, then W1, W2 = bivalent hydrocarbon chain; R = H, (un)substituted hydrocarbon group or heterocyclic ring; or R is not H, R

may be linked to W; D1, D2 = a bond, O, S, (un)substituted NH; Y = (un)substituted hydrocarbyl or heterocyclyl] as a modifying group to be eliminated from a prodrug. It enables prodrug development based on the modification of a nitrogenous heterocycle, etc., with N-(2-acyloxyethyl)-Nmethylcarbamoyl groups. For example, 3'-azido-3'-deoxythymidine (zidovudine), N-cyano-N'-methyl-N''-[2-((4-methyl-5-imidazolyl)methylthio)ethyl]quanidine (cimetidine), (R)-2-[[[3-methyl-4-(2,2,2-methyl-4-(2,2,2-methyl-4-(2,2,2,trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]-1H-benzimidazole [(R)-(+)-lansoprazole], 2-[[(3,5-Dimethyl-4-methoxy-2pyridyl)methyl]sulfinyl]-5-methoxy-1H-benzimidazole (omeprazole), 2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridyl]methyl]sulfinyl]benzimidazole (rabeprazole), 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2pyridyl)methyl]sulfinyl]-1H-benzimidazole (pantoprazole), or 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-Imidazo[4,5-b]pyridine (tenatoprazole) were modified by one of CONMeCH2CH2OCO2Et, CONMeCH2CH2OAc, and CONMeCH2CH2OCO2-(tetrahydropyranyl-4-yl) groups.

IT 113712-98-4

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of nitrogenous heterocycle prodrugs having N-(acyloxyethyl)-N-methylcarbamoyl groups)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 111 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:1006770 CAPLUS

DOCUMENT NUMBER: 140:42178

TITLE: Preparation of prodrugs of benzimidazoles and analogs

as proton pump inhibitors for the treatment of peptic

ulcers

INVENTOR(S): Kamiyama, Keiji; Banno, Hiroshi; Sato, Fumihiko

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 216 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA'	PATENT NO.					D	DATE			API	PLICA	NOIT.	NO.		Е	ATE	
WO	2003	 1058	 45		A1	_	2003	1224		WO	2003	-JP75	46		2	0030	613
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	ΒA,	BE	в, во	, BR,	BY,	BZ,	CA,	CH,	CN,
												, ES,					
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	E, KO	, KR,	KΖ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	ΜV	ν, MΣ	, MZ,	NΙ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SF	ζ, SI	, TJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZN	1, ZV						
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ	Z, TZ	, UG,	ZM,	ZW,	AM,	AZ,	BY,
												, CY,					
		FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC	C, NI	, PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GÇ	Q, GV	, ML,	MR,	NE,	SN,	TD,	ΤG
CA	2489	361			A1		2003	1224		CA	2003	-2489	361		2	0030	613
AU	2003	2423	90		A1		2003	1231		ΑU	2003	-2423	90		2	0030	613
JP	2004	3074	57		Α		2004	1104		JΡ	2003	-1693	8 0		2	0030	613
EP	1513	527			A1		2005	0316		ΕP	2003	-7334	26		2	0030	613
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, II	, LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑI	L, TF	, BG,	CZ,	EE,	HU,	SK	
BR	2003	0118	01		Α		2005	0412		BR	2003	-1180	1		2	0030	613
	1678				Α							-8188					
MX	2004	PA12	396		Α		2005	0617		MX	2004	-PA12	396		2	0041	209
US	2005	0222	210		A1		2005	1006				-5176				0041	213
IN	2005	KN00	033		A		2006	0526		ΙN	2005	-KN33			2	0050	103
ZA	2005	0000	90		Α		2006	0726				-90				0050	105
ИО	2005	0001	41		Α		2005	0127				-141				0050	
RIORIT	Y APP	LN.	INFO	.:						JΡ	2002	-1750	86		A 2	0020	614
										-		-4108	-			0030	219
										WO	2003	-JP75	46		W 2	0030	613
THER SI	ALIBCE.	191.			MADI	דתם	1/10 •	12179	2								

OTHER SOURCE(S): MARPAT 140:42178

GI

AΒ Title compds. I [wherein A = (un)substituted pyridine ring; B = (un) substituted benzene or monocyclic aromatic heterocycle; X1 and X2 = 0 or S; W = W1ZW2; W1 and W2 = independently divalent hydrocarbon chain or abond; Z = (un)substituted divalent hydrocarbon ring, divalent heterocyclic ring, O, SOO-2, or NE; E = H, alkanoyl, (ar)alkoxycarbonyl, thiocarbamoyl, alkylsulfinyl, alkylsulfonyl, (alkyl)sulfamoyl, arylsulfamoyl, arylsulfinyl, arylsulfonyl, arylcarbonyl, or (un)substituted hydrocarbon, heterocyclyl, or carbamoyl; R = (un)substituted hydrocarbon or heterocyclyl; R and W may be bonded to each other; D1 and D2 = independently a bond, O, S, or NR1; R1 = H or (un)substituted hydrocarbon; Y = (un) substituted hydrocarbon or heterocyclyl; with provisos; and salts thereof] were prepared For example, reaction of bis(trichloromethyl)carbonate with 2-(methylamino)ethyl acetate⊕HCl in the presence of pyridine in THF, followed by coupling with benzimidazole using a catalytic amount of 4-dimethylaminopyridine and TEA in THF, gave II. Compds. of the invention are proton pump inhibitor prodrugs, which show superior antiulcer activity, gastric acid secretion inhibitory action, mucosa-protecting action, and anti-Helicobacter pylori action (no data).

(preparation of prodrugs containing benzimidazoles and analogs as protor pump

inhibitors for treatment of peptic ulcers)

RN 113712-98-4 CAPLUS

IT 635751-89-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of prodrugs containing benzimidazoles and analogs as proton

pump

inhibitors for treatment of peptic ulcers)

RN 635751-89-2 CAPLUS

CN Carbonic acid, ethyl 2-[[[5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-imidazo[4,5-b]pyridin-1-yl]carbonyl]methylamino]ethyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

1

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 112 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN T.3

2003:652131 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 139:214237

Preparation of nitrate prodrugs able to release nitric TITLE:

oxide in a controlled and selective way and their use for prevention and treatment of inflammatory, ischemic

and proliferative diseases

INVENTOR(S): Scaramuzzino, Giovanni

PATENT ASSIGNEE(S): Italy

SOURCE: Eur. Pat. Appl., 313 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

GI

PAT	ENT I	NO.			KIN	D	DATE		i	APPL	ICAT	ION 1	. O <i>l</i>		D	ATE	
						_											
EP	1336	602			A1		2003	0820		EP 2	002-	4250	75		2	0020	213
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
PRIORITY	APP	LN.	INFO	.:						EP 2	002-	4250	75		2	0020	213

Ме Me Ме Me 0 NO₂ 0 Ме

Ме

AΒ New pharmaceutical compds. of general formula F-(X)q (I) [q = 1-5,

Me

Ме

ΙI

preferably 1; F is chosen among drugs such as δ -tocopherol, clidanac, diethylhomospermine, glucosamine, thymocartin, vofopitant, etc.; X is chosen among 4 groups M, T, V, and Y where M = ONO2, nitrate salt, nitrite ester, ONO, thoinitrite, SNO, etc., T = OR1-M, OR1OR1-M, SR1NR2R1-M, NR2R1-M, NR2R1SR1-M, etc., R1 = saturated or unsatd., linear or branched alkylene, having 1 to 21 carbon atoms or a saturated or unsatd., optionally heterosubstituted or branched cycloalkylene, having 3 to 7 carbon atoms or an optionally heterosubstituted arylene having 3 to 7 carbon atoms; R2 = H, saturated or unsatd., linear or branched 1-21 carbon atom alkyl, saturated or unsatd. optionally heterosubstituted or branched 3-7carbon cycloalkyl, optionally heterosubstituted 3-7 carbon aryl; R1, R2 = OH, SH, F, Cl, Br, OPO3H2, CO2H, etc.; bond between F and T = carboxylicester, carboxylic amide, glycoside, azo, thioester, sulfonic ester, etc.; V = Z-M2, OZ-M2, NR2Z-M2, R1Z-M2, OR1-M2, OR1Z-M2, M2 = M, R1-M, OR1-M, SR1-M, NR2R1-M; ZM2 = COCH2CH(M2)CH2N+Me3, COCH2CH2COM2, COCH(NHR2)CH2M2, etc.; Y = 4-COC6H4CH2ONO2, O(CH2)4ONO2, COCH(NH2)CH2ONO2, 3-OC6H4CH2ONO2, etc.] were prepared $% \left(1\right) =\left(1\right) +\left(1\right)$ 4-HO2CC6H4CH2ONO2 to give the nitroxymethyl derivative II. The compds. of general formula I are nitrate prodrugs which can release nitric oxide in vivo in a controlled and selective way and without hypotensive side effects and for this reason they are useful for the preparation of medicines for prevention and treatment of inflammatory, ischemic, degenerative and proliferative diseases of musculoskeletal, tegumental, respiratory,

gastrointestinal, genito-urinary and central nervous systems.

IT 586349-19-1P 586349-47-5P 586349-49-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nitrate prodrugs for treating or preventing inflammatory, ischemic, degenerative, and proliferative diseases)

RN 586349-19-1 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, mononitrate (9CI) (CA INDEX NAME)

CM 1

CRN 113712-98-4 CMF C16 H18 N4 O3 S

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

CM 2

CRN 7697-37-2 CMF H N O3

RN 586349-47-5 CAPLUS

CN Benzoic acid, 4-[(nitrooxy)methyl]-, [4-methoxy-6-[[(5-methoxy-1H-imidazo[4,5-b]pyridin-2-yl)sulfinyl]methyl]-5-methyl-3-pyridinyl]methyl ester (9CI) (CA INDEX NAME)

RN 586349-49-7 CAPLUS

CN 3-Pyridinecarboxylic acid, 4-methoxy-6-[[(5-methoxy-1H-imidazo[4,5-b]pyridin-2-yl)sulfinyl]methyl]-5-methyl-, 3-[(nitrooxy)methyl]phenyl ester (9CI) (CA INDEX NAME)

19

REFERENCE COUNT:

THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 113 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:319683 CAPLUS

DOCUMENT NUMBER: 138:326593

TITLE: Granules containing acid-unstable chemicals in large

amount

INVENTOR(S): Shimizu, Toshihiro; Nakano, Yoshinori PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					D	DATE			APPI	LICAT	ION 1	NO.		I	DATE	
WO	2003	0329	 53		A1	_	2003	0424		WO 2	2002-	 JP10	720		-	20021	016
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MΖ,	NO,	NZ,	OM,	PH,	PL,
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,
		UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW							
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FΙ,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	BJ,	CF,
		CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG			
CA	2463	690			A1		2003	0424		CA 2	2002-	2463	690		2	20021	016
AU	2002	3439	91		A1		2003	0428		AU 2	2002-	3439	91		2	20021	016
JP	2003	1925	79		Α		2003	0709		JP 2	2002-	3018	66		2	20021	016
EP	1459	737			A1		2004	0922		EP 2	2002-	7753	58		4	20021	016
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK		
CN	1571	659			A		2005	0126		CN 2	2002-	8204	86		2	20021	016
US	2005	0003	005		A1		2005	0106		US 2	2004-	4926	90		4	20040	415
JP	2006	2826	77		Α		2006	1019		JP 2	2006-	2035.	39		2	20060	726
PRIORIT	Y APP	LN.	INFO	.:						JP 2	2001-	3194	44		A 2	20011	017
										JP 2	2002-	3018	66		A3 2	20021	016
										WO 2	2002-	JP10	720		W 2	20021	016

OTHER SOURCE(S): MARPAT 138:326593

AB It is intended to provide prepns. such as capsules containing an acid-unstable chemical (in particular, a benzimidazole compound having an antiulcer effect, etc.) at a high concentration which are prepared by using about 12 % by weight or more

(based on the total granules) of the acid-unstable chemical and blending a basic inorg. salt therewith to give granules of about 600 μm or more in the average grain size. Granules were prepared containing lansoprazole 30, sucrose/starch spherical particles 50, MgCO3 10, sucrose 30, starch 14, low-substituted hydroxypropyl cellulose 15, and hydroxypropyl cellulose 1 part. The granules were filled into capsules, which were then coated with enteric-soluble polymethacrylate compns.

IT 113712-98-4, TU 199

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (granules containing acid-unstable compds. and inorg. salts)

RN 113712-98-4 CAPLUS

REFERENCE COUNT:

18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 114 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:221490 CAPLUS

DOCUMENT NUMBER: 138:260440

TITLE: Self emulsifying drug delivery system containing

NSAIDs

INVENTOR(S): Holmberg, Christina
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
SOURCE: PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					D	DATE			APPL	ICAT	ION I	NO.		D.	ATE	
WO	2003	0222	49		A1		2003	0320	,	WO 2	002-	SE15	98		2	0020	905
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MΖ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	BG,
		CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,
		PT,	SE,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,
		NE,	SN,	TD,	ΤG												
AU	2002	3291	49		A1		2003	0324		AU 2	2002-	3291	49		2	0020	905
EP	1427	392			A1		2004	0616		EP 2	2002-	7657	47		2	0020	905
EP	1427	392			В1		2008	0220									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK		
JP	2005	5047	88		${ m T}$		2005	0217		JP 2	2003-	5263	79		2	0020	905
AT	3865	03			T		2008	0315		AT 2	2002-	7657	47		2	0020	905
US	2004	02489	974		A1		2004	1209		US 2	004-	4885	85		2	0040	304
PRIORIT	Y APP	LN.	INFO	.:						SE 2	001-	2993		7	A 2	0010	907
									,	WO 2	2002-	SE15	98	Ī	W 2	0020	905

OTHER SOURCE(S): MARPAT 138:260440

AB A pharmaceutical composition suitable for oral administration, in form of an emulsion pre-concentrate, comprises 1 or more NO-releasing NSAID(s), 1 or more surfactants, of which at least one is phospholipid, the composition forming an in-situ oil-in-water emulsion upon contact with gastrointestinal fluids. The composition may optionally also comprise an addnl. oil or semi-solid fat. Further, 1 or more short-chain alcs. can optionally be included in the composition Also within the scope of the invention is a combination with a proton pump inhibitor. The pharmaceutical composition is useful in the treatment of pain and inflammation. Further within the scope of the invention is kit comprising a pharmaceutical composition according to the invention in a unit dosage form, in combination with a proton pump inhibitor, and the proton pump inhibitor is enteric coated. Thus, a formulation contained Lipoid S100 0.30, propylene glycol 0.90, and a NO-releasing NSAID 4.00 q.

IT 113712-98-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (self emulsifying drug delivery system containing NSAIDs)

RN 113712-98-4 CAPLUS

6

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 115 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:733615 CAPLUS

DOCUMENT NUMBER: 138:296876

TITLE: Tenatoprazole: benatoprazole, TU 199

AUTHOR(S): Anon. CORPORATE SOURCE: N. Z.

SOURCE: Drugs in R&D (2002), 3(4), 276-277

CODEN: DRDDFD; ISSN: 1174-5886

PUBLISHER: Adis International Ltd.
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Benatoprazole [TU 199; tenatoprazole] is an imidazopyridine derivative and a proton pump inhibitor. It is under development with Mitsubishi Pharma Corporation (Mitsubishi Chemical) and Hokuriku Seiyaku (BASF Pharma, now Abbott Labs.) in Japan as an oral antiulcer agent and for the treatment of reflux esophagitis and Zollinger-Ellison syndrome. An application for approval of benatoprazole (formerly tenatoprazole) has been registered in Japan. The pharmacodynamics and application in therapy for peptic ulcer disease are discussed.

IT 113712-98-4, Tenatoprazole

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmacodynamics and antiulcer application of proton pump inhibitor tenatoprazole (benatoprazole, TU 199))

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 116 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:752824 CAPLUS

DOCUMENT NUMBER: 135:314438

TITLE: Proteolipid subunits of vacuolar H+-ATPase (ATP6F) as

tumor antigens, application to cancer therapy, and use

of proton pump inhibitor as anticancer agent

INVENTOR(S): Sato, Nobuo; Suzuki, Nobutaka; Yamaguchi, Masaaki;

Yamaguchi, Nobuo; Okuma, Katsuji

PATENT ASSIGNEE(S): Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 79 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001286284	A	20011016	JP 2000-103966	20000405
PRIORITY APPLN. INFO.:			JP 2000-103966	20000405

AΒ Proteolipid subunits of vacuolar H+-ATPase (V-ATPase) as tumor antigens, use of antibodies and antisense oligonucleotides targeting those antigens as anticancer agent, and use of proton pump inhibitor as anticancer agent, are disclosed. Tumor antigen recognized by monoclonal antibody KCT-1 was isolated from thyroid cancer cell line TPC-1. The amino acid sequence of this antigen named SSY (S-1) was found match that of vacuolar H+-ATPase proteolipid subunit (ATP6F, c'' subunit). The epitope of SSY antigen for KCT-1 antibody was determined SSY antigen was found to strongly expressed in all the cancers examined; thyroid cancer, breast cancer, stomach cancer, esophagus cancer (squamous cell carcinoma), laryngeal cancer, colon cancer, rectal cancer, anal cancer, pancreatic cancer, lung cancer, renal cancer, bladder cancer, ovarian cancer, uterus cancer, cervical cancer, cunnus cancer, skin cancer, melanoma, central or peripheral nervous system cancer, gingival cancer, pharyngeal carcinoma, mediastinal tumor, liver cancer, bile duct cancer (cholangioma), gallbladder cancer, renal pelvis tumor, ureter cancer, testicular cancer, fallopian tube cancer, vaginal cancer, sarcoma, leukemia, erythroleukemia, multiple myeloma, malignant lymphoma, and carcinosarcoma. CDNA for a mouse homolog was cloned. Intradermal, s.c., and oral administration of the antigen in mouse demonstrated antitumor activity and safety. Antitumor activity was also demonstrated by phosphorothioate antisense oligonucleotide. Various inhibitors of V-ATPase, H+/K+-ATPase, and H+/Cl- symporter were found to have antitumor activity.

IT 113712-98-4, TU-199

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (proteolipid subunits of vacuolar H+-ATPase (ATP6F) as tumor antigens, application to cancer therapy, and use of proton pump inhibitor as anticancer agent)

RN 113712-98-4 CAPLUS

L3 ANSWER 117 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:676579 CAPLUS

DOCUMENT NUMBER: 135:231708

TITLE: New self emulsifying drug delivery system INVENTOR(S): Holmberg, Christina; Siekmann, Britta

PATENT ASSIGNEE(S): AstraZeneca AB, Swed. SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA.	KIND DATE			APPLICATION NO.						DATE										
								WO 2001-SE467												
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ΒA,	BE	3,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE	Ξ,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,		
		HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KO	3,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,		
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	ΜV	N,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,		
		RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TN	4 ,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,		
		VN,	YU,	ZA,	ZW															
	RW:	GH,	GM,	KΕ,	LS,	MW,	MΖ,	SD,	SL,	SZ	Ζ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,		
		DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΊ	Γ,	LU,	MC,	NL,	PT,	SE,	TR,	BF,		
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	MI	,	MR,	NE,	SN,	TD,	ΤG				
CA	2401498								CA 2001-2401498											
EP	1267832							EP 2001-910305							20010306					
EP		267832					2004													
	R:						ES,						LI,	LU,	NL,	SE,	MC,	PT,		
							RO,													
	2001009014					BR 2001-9014														
						JP 2001-564741														
	2003000882					HU 2003-882							20010306							
	2003000882				EE 2002-500							20010206								
	200200500			A																
	AT 268162 NZ 521009				Τ	AT 2001-910305														
	NZ 521009				A		NZ 2001-521009 PT 2001-910305													
	PT 1267832 ES 2220728				T	ES 2001-910305														
	ES 2220728 RU 2270675																			
	SK 285982					RU 2002-122744 SK 2002-1257														
_	2002MN01102					IN 2002-MN1102														
					A 20050304 A 20031124															
	X 2002PA08657																			
					A 20030224 A1 20030828															
					A 20021105				NO 2002-220791											
									KR 2002-711731											
HK 1050632																				
	ORITY APPLN. INFO.:					A1 20050318											A 20000308			
I OI\I I .	OLITE THE DIA . THE O									-	_			7			0010			
											20	, , , ,		'		۷ ۷	0010	500		

OTHER SOURCE(S): MARPAT 135:231708

AB The present invention claims and discloses a pharmaceutical composition suitable for oral administration, in form of an emulsion pre-concentrate, comprising: 1 or more NO-releasing NSAID(s), 1 or more surfactants, optionally an addnl. oil or semi-solid fat. The composition forms an in-situ oil-in-water emulsion upon contact with gastrointestinal fluids. The composition may optionally also comprise 1 or more short-chain alcs. Also within the scope of the invention is a combination with a proton pump inhibitor. The pharmaceutical composition is useful in the treatment of pain and inflammation. Further within the scope of the invention is kit comprising a pharmaceutical composition according to the invention in a unit dosage form, in combination with a proton pump inhibitor, and the proton

pump inhibitor is enteric coated. Thus, a semisolid formulation contained a NO-releasing NSAID 750, Pluronic F127 450, and omeprazole 20 g.

IT 113712-98-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (self emulsifying drug delivery system)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 118 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:300517 CAPLUS

DOCUMENT NUMBER: 134:316135

TITLE: Formulation of substituted benzimidazoles

INVENTOR(S): Bruells, Mikael

PATENT ASSIGNEE(S): Astrazeneca Ab, Swed. SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	ATENT	NO.			KIND DATE			APPLICATION NO.						DATE						
M.	0 2001 W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	ВВ	2000- , BG, , FI,	BR,	BY,		CA,		CN,			
		HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP	, KR,	KZ,	LC,	LK,	LR,	LS,	LT,			
		SD,		SG,					•		, TT,									
	R₩:	GH,	GM,	KE,							, TZ,									
mi		CF,					GN,	GW,	ML,	MR	, NE,	SN,	TD,	TG	·	·	·			
		236372					2005				2000-	20001009								
		2425199					2001				2000-		20001013							
		2000014895									2000-	20001013								
		200201103							TR 2002-1103											
		1274427 1274427				A1 20030115 B1 20050921					EP 2000-973295						20001013			
اظ	R:		BE	СН					GB	GR	, IT,	T.T	T.II	NT.	SE	МС	РТ			
	1(•						RO,					,	шо,	111,	51,	110,	/			
Н	I 2002	2002003121				· · · · · ·								20001013						
		2002003121				A2 20030128 HU 2002-3121 A3 20040128									_					
						T 20030402					JP 2001-531388						20001013			
		2003512327 200200204					2003		EE 2002-204						20001013					
N:	z 5181	518155				A 20040730				NZ 2000-518155						20001013				
A	J 7828	782866				B2 20050901					2001-	20001013								
A'	Г 3048	518155 782866 304851 2246903				T 20051015					2000-	20001013								
E	S 2246	2246903				T3 20060301					ES 2000-973295						20001013			
RI	J 2286	2286782				C2 20061110				RU 2002-110328						20001013				
U	6730685				B1 20040504				US 2000-701714						20001201					
В	G 1066	106602					A 20021229			BG 2002-106602						20020410				
Z	A 2002	2002002905				A 20030714				ZA 2002-2905						20020412				
M	MX 2002PA03900						2002	0930		MX	2002-	PA39	00		2	0020	418			
	NO 2002001860					A 20020521										20020419				
	KR 785603					B1 20071214														
	HK 1051142					A1 20060203														
PRIORI'	RIORITY APPLN. INFO.:									-	1999-				A 1		-			
										WO	2000-	SE19	92		W 2	0001	013			

OTHER SOURCE(S): MARPAT 134:316135

AB The present invention relates to stable liquid formulations that comprise a water free or almost water free, polyethylene glycol solution of sodium or potassium salt of substituted benzimidazoles or their enantiomers as H+,K+-ATPase inhibitors. Alternatively, the sodium or potassium salt of the H+,K+-ATPase inhibitor may be formed in situ in the polyethylene glycol solution by adding sodium or potassium hydroxide together with the active compound The invention is also directed to the preparation of the claimed

formulation, use of the stable liquid formulations in medicine and in the treatment of gastrointestinal diseases. For example, omeprazole sodium

was formulated in a liquid formulation containing PEG 400. The solution was

not sensitive to oxygen in the head space nor to a small water content. The high solubility of omeprazole sodium in PEG is favorable regarding the formulation aspects of a parenteral pharmaceutical product.

IT 335299-59-7 335299-60-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid formulations of substituted benzimidazoles as proton pump inhibitors for treatment of gastrointestinal diseases)

RN 335299-59-7 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 335299-60-0 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt (9CI) (CA INDEX NAME)

K

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 119 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:608578 CAPLUS

DOCUMENT NUMBER: 133:203023

TITLE: Nitrosated and nitrosylated proton pump inhibitors,

compositions and methods of use

INVENTOR(S): Garvey, David S.; Letts, L. Gordon; Tam, Sang William;

Wang, Tiansheng; Richardson, Stewart K.

PATENT ASSIGNEE(S): Nitromed, Inc., USA

SOURCE: PCT Int. Appl., 100 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

I	PATENT NO.					KIN	D	DATE APPLICATION NO.						DATE					
1	 WO	2000	05003	37		A1	_	2000	0831		WO	200	7-0 (JS25:	 24		-	20000	225
		W:	ΑE,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG	6, B	BR,	BY,	CA,	CH,	CN,	CR,	CU,
			CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD), G	ΞE,	GH,	GM,	HR,	HU,	ID,	IL,
			IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC	C, L	ΔK,	LR,	LS,	LT,	LU,	LV,	MA,
			MD,	MG,	MK,	MN,	MW,	MX,	NO,	NΖ,	PL	, P	РΤ,	RO,	RU,	SD,	SE,	SG,	SI,
			SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG	3, U	JS,	UZ,	VN,	YU,	ZA,	ZW	
		RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SL,	SZ,	TZ	, U	JG,	ZW,	ΑT,	BE,	СН,	CY,	DE,
			DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU	J, M	1C,	NL,	PT,	SE,	BF,	BJ,	CF,
			CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE	3, S	SN,	TD,	ΤG				
(CA	2362	930			A1		2000	0831		CA	200	00-2	2362	930		2	20000	225
Ā	AU	2000	03219	96		Α		2000	0914		AU	200	0-3	3219	6		2	20000	225
Ā	AU	7811	33			В2		2005	0505										
Ι	EΡ	1154	771			A1		2001	1121		EΡ	200	0-9	9100	39		2	20000	225
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	₹, I	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO											
Ċ	JΡ	2002						2002							48			20000	225
		6852						2005	0208		US	200	0-1	5128	29		2	20000	225
Ţ	IJS	2004						2004			US	200	4 - 8	3663	03		4	20040	614
Ţ	IJS	7332.	505			В2		2008	0219										
Ā	AU	2005	2025	53		A1		2005	0707		AU	200)5-2	2025	53		2	20050	610
PRIOR	ΙΤY	APP:	LN.	INFO	.:						US	199	9-1	1221	11P		P :	L9990	226
											US	200	0 - i	5128	29		A3 2	20000	225
											WO	200	J−0(JS25:	24		W 2	20000	225

OTHER SOURCE(S): MARPAT 133:203023

The invention describes nitrosated and/or nitrosylated proton pump inhibitor compds., as well as compns. comprising ≥1 proton pump inhibitor compound that is optionally substituted with ≥1 NO and/or NO2 group, and, optionally, ≥1 compound that donates, transfers or releases nitric oxide, stimulates endogenous synthesis of nitric oxide, elevates endogenous levels of endothelium-derived relaxing factor, or is a substrate for nitric oxide synthase, and/or ≥ 1 nonsteroidal antiinflammatory drug, selective COX-2 inhibitor antacid, bismuth-containing reagent, acid-degradable antibacterial compound, and mixts. thereof. The invention also provides methods for treating and/or preventing gastrointestinal disorders; facilitating ulcer healing; decreasing the recurrence of ulcers; improving gastroprotective properties, anti-Helicobacter pylori properties or antacid properties of proton pump inhibitors; decreasing or reducing the gastrointestinal toxicity associated with the use of nonsteroidal antiinflammatory compds.; and treating Helicobacter pylori and viral infections. The compds. and/or compns. of the present invention can also be provided in the form of a pharmaceutical kit. Preparation of e.g. nitrosylated lansoprazole is described. Compared to lansoprazole, the nitrosylated lansoprazole significantly inhibited the formation of EtOH/HCl-induced gastric lesions.

IT 113712-98-4D, Tenatoprazole, nitrosated and nitrosylated derivs.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nitrosated and nitrosylated proton pump inhibitors, compns., combinations, and methods of use)

RN 113712-98-4 CAPLUS

CN

3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 120 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN T.3

2000:15181 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 132:64176

TITLE: Preparation of 2-hydroxymethylpyridine metal complexes

as intermediates for pyridinebenzimidazoles.

INVENTOR(S): Nikolopoulos, Angelo; Schickaneder, Helmut; Kocher,

Christian; Murphy, Trevor; Hermann, Gesine

PATENT ASSIGNEE(S): Russinsky Limited, Ire. SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA.	PATENT NO.					D	DATE APPLICATION NO.							DATE			
WO	2000	0004	74		A1	_	2000	0106		WO 1	 999-	 IE55			1	9990	618
	W:	ΑE,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
		DE,	DE,	DK,	DK,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
		IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,
		MG,	MK,	MN,	MW,	MX,	NO,	NΖ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,
		SL,	ΤJ,	TM													
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,
		ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,
		CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG					
AU	9943	877			Α		2000	0117		AU 1	999-	4387	7		1	9990	618
PRIORIT	Y APP	LN.	INFO	. :						IE 1	998-	514		1	A 1	9980	626
					WO 1999-IE55						Ţ	W 1	9990	618			
OTHER SO	OTHER SOURCE(S):						CASREACT 132:64176; MARPAT 132:64176										

GΙ

$$R^2$$
 R^3
 R^3

AB IkMzAl(OR5)mSn [R1-R3 = H, alkyl, CF3, CHF2, CH2F, alkoxy, alkoxyalkoxy, OCH2CF3; R4 = H, alkyl, PhCH2, AcO, PhCH2O, trialkylsilyl, neg. charge; R5 = alkyl, aryl, CH2CF3, CF3, CHF2, alkylalkoxy; X = halo, NO2, SO3, OH; M = alkaline earth metal, third main group element, transition metal; S = solvent; k = 1-4; l = 1-3; m = 0-3; $n \ge 0$; z = 1+m; with a proviso] and IIkMz(OR5)mSn [Y = alkoxy, aryloxy, OCH2CF3, alkoxyalkoxy, alkylthio, alkylthioalkylthio; z = m; other variables as above], were prepared Thus, 4-nitro-2,3,5-trimethylpyridine N-oxide was heated in HOAc/Ac2O at 20-100° for 1 h to give 88% 2-acetoxymethyl derivative, which was stirred at 10-30° with NaOH in EtOH for 1 h to give 84% 3,5-dimethyl-2-hydroxymethyl-4-nitropyridine (II). II in MeOH was treated with ZnCl2 and with NaOMe in MeOH to give 100% Zn(II)ClOMe.

113712-98-4P, TU-199 ΙT

> RL: PNU (Preparation, unclassified); PREP (Preparation) (preparation of 2-hydroxymethylpyridine metal complexes as intermediates for pyridinebenzimidazoles)

RN 113712-98-4 CAPLUS

7

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 121 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:403179 CAPLUS

DOCUMENT NUMBER: 131:208915

TITLE: General pharmacological properties of the new proton

pump inhibitor (±)-5-methoxy-2-[[(4-methoxy-3,5dimethylpyrid-2-yl)methyl]sulfinyl]-1H-imidazo[4,5-

b]pyridine

AUTHOR(S): Kakinoki, Bunpei; Ono, Chizuko; Yamazaki, Noriyuki;

Chikamatsu, Noriko; Wakatsuki, Daisuke; Uchiyama,

Kazuyuki; Morinaka, Yasuhiro

CORPORATE SOURCE: Medicinal Research Group II, Kazusa Research

Laboratories, Tokyo Tanabe Co., Ltd., Kisarazu, Japan

SOURCE: Methods and Findings in Experimental and Clinical

Pharmacology (1999), 21(3), 179-187

CODEN: MFEPDX; ISSN: 0379-0355

PUBLISHER: Prous Science

DOCUMENT TYPE: Journal LANGUAGE: English

AB The general pharmacol. profiles of the title compound TU-199 on the central nervous system, cardiorespiratory system, autonomic nervous system,

gastrointestinal system and renal functions were investigated. TU-199 had no effects on general signs and behavior in mice. TU-199 (300 mg/kg p.o.) decreased locomotor activity 3 h after administration in mice. TU-199 had

no effect on pentobarbital-induced hypnosis, analgesic activity and

electroshock-induced convulsion in mice, and on rectal temperature in rats. However, TU-199 (300 mg/kg p.o.) showed slight anticonvulsant activity on pentylenetetrazole-induced convulsion in mice. TU-199 had no effect on

respiratory rate, blood pressure, heart rate, femoral blood flow and ECG

in anesthetized dogs. TU-199 (10-4 M) caused the cumulative

concentration-response curve obtained with acetylcholine in isolated guinea pig ileum to shift to the right. However, TU-199 showed no effect on contraction of isolated guinea pig ileum and had no effect on intestinal

motility in mice, gastric emptying in rats, bile secretion in rats and carbachol-induced salivary secretion in mice. TU-199 had no effect on urinary volume and excretion of electrolytes in rats. These results suggest that TU-199 does not induce serious adverse effects on the central nervous

system, cardiorespiratory system, autonomic nervous system, qastrointestinal system and renal functions with the exception of a

decrease in spontaneous motor activity with high doses.

IT 113712-98-4, TU-199

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmacol. properties of proton pump inhibitor TU-199)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \end{array}$$
 Me
$$\begin{array}{c|c} N & Me \\ \end{array}$$
 OMe

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 122 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN T.3

1999:367805 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 131:96947

Pharmacokinetic studies of $(\pm)-5$ -methoxy-2-[[(4-TITLE:

methoxy-3,5-dimethylpyrid-2-yl)methyl]sulfinyl]-1Himidazo[4, 5-b]pyridine (TU-199). (V). Examination of

drug interaction in plasma protein binding

AUTHOR(S): Kinbara, Mihoko; Ishiwata, Tomoe; Morotome, Kazuo CORPORATE SOURCE:

Kazusa Research Laboratories, Tokyo Tanabe Co., Ltd.,

Yana Kisarazu, 292-0812, Japan

SOURCE: Iyakuhin Kenkyu (1999), 30(3), 128-133

CODEN: IYKEDH; ISSN: 0287-0894

PUBLISHER: Nippon Koteisho Kyokai

DOCUMENT TYPE: Journal Japanese LANGUAGE:

The present study was conducted to determine the types of protein to which AR TU-199 binds, and to examine whether 7 drugs (warfarin, diazepam, digitoxin, nifedipine, phenytoin, tolbutamide and propranolol) compete with TU-199 for binding to human plasma protein. In the evaluation of competitive binding, drugs were generally used at about 3 times their maximum plasma concentration (Cmax) obtained after a single oral administration to humans. 1. TU-199 (5 $\mu g/mL$) binding rates with purified human albumin, $\alpha 1$ -acidic glycoprotein and γ -globulin were 99.4%, 54.9% and 23.8%, resp. 2. The TU-199 (5 $\mu g/mL)$ binding rate with human plasma protein was 99.7%. 3. Of the 7 drugs tested, tolbutamide significantly decreased TU-199's plasma protein binding rate from 99.7% to 99.3% at 150 $\mu g/mL$, but caused no significant decrease at 50 $\mu g/mL$ (Cmax). The other 6 drugs had no effect on the binding of TU-199 with plasma protein. 4. TU-199 had no effect on the binding of the 7 drugs with plasma protein.

ΙT 113712-98-4, TU-199

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(pharmacokinetic studies of $(\pm)-5$ -methoxy-2-[[(4-methoxy-3,5dimethylpyrid-2-yl)methyl]sulfinyl]-1H-imidazo[4, 5-b]pyridine

(TU-199). (V). examination of drug interaction in plasma protein binding)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

L3 ANSWER 123 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:367804 CAPLUS

DOCUMENT NUMBER: 131:96946

TITLE: Pharmacokinetic studies of $(\pm)-5$ -methoxy-2-[[(4-

methoxy-3,5-dimethylpyrid-2-yl)methyl]sulfinyl]-1H-

imidazo[4, 5-b]pyridine (TU-199). (IV). Plasma

concentration of TU-199 in rats and dogs

AUTHOR(S): Saito, Shinko; Sebata, Noriyuki; Ishiwata, Tomoe;

Kinbara, Mihoko; Morotome, Kazuo

CORPORATE SOURCE: Kazusa Research Laboratories, Tokyo Tanabe Co., Ltd.,

Yana Kisarazu, 292-0812, Japan

SOURCE: Iyakuhin Kenkyu (1999), 30(3), 119-127

CODEN: IYKEDH; ISSN: 0287-0894

PUBLISHER: Nippon Koteisho Kyokai

DOCUMENT TYPE: Journal LANGUAGE: Japanese

AB Plasma concns. of TU-199 were determined after oral, i.v. and intraduodenal administration of TU-199 to rats and dogs. 1. After oral administration of TU-199 to non-fasting male rats at a dose of 2.5 mg/kg, the plasma

concentration of TU-199 reached a maximum of 2.19 $\mu g/mL$ at 0.26 h, and

declined

exponentially with a half-life of 1.38 h. The bioavailability was 37.2%. In the case of intraduodenal administration, the bioavailability was 76.6%. 2. After oral administration of TU-199 to male rats at the doses of 2.5, 10, and 40 mg/kg, both Cmax and AUCO.apprx. ∞ closely proportional to the dose. 3. After oral administration of TU-199 to male

rats, the plasma concentration was higher and the bioavailability was about twice

as high in fasting rats as compared with non-fasting rats. 4. After oral administration of TU-199 to male rats at a dose of 2.5 mg/kg, once a day for 7 days, the plasma concentration was similar to that after a single dose. 5.

After oral administration of TU-199 to female rats, the plasma concentration

was

higher and T1/2 was longer than in male rats, but bioavailability was similar in both sexes. 6. After oral administration of TU-199 to female dogs, the plasma concentration of TU-199 was similar to that in male dogs. 7 After oral administration of TU-199 to fasting male and female dogs at a dose of 2.5 mg/kg, the plasma concentration of TU-199 reached a maximum of 10.11

 $\mu g/mL$ at 0.53 h, and declined exponentially with the half-life of 1.57 h. The bioavailability was 78.3%.

IT 113712-98-4, TU-199

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(pharmacokinetic studies of (\pm) -5-methoxy-2-[[(4-methoxy-3,5-dimethylpyrid-2-yl)methyl]sulfinyl]-1H-imidazo[4, 5-b]pyridine (TU-199). (IV). Plasma concentration of TU-199 in rats and dogs)

RN 113712-98-4 CAPLUS

L3 ANSWER 124 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:347657 CAPLUS

DOCUMENT NUMBER: 131:125259

TITLE: The long-lasting effect of TU-199, a novel

H+, K+-ATPase inhibitor, on gastric acid secretion in

dogs

AUTHOR(S): Uchiyama, Kazuyuki; Wakatsuki, Daisuke; Kakinoki,

Bunpei; Takeuchi, Yoshishige; Araki, Tsutomu;

Morinaka, Yasuhiro

CORPORATE SOURCE: Medicinal Research Group II, Kazusa Research

Laboratories, Tokyo Tanabe Company Limited, Chiba,

292-0812, Japan

SOURCE: Journal of Pharmacy and Pharmacology (1999), 51(4),

457-464

CODEN: JPPMAB; ISSN: 0022-3573

PUBLISHER: Royal Pharmaceutical Society of Great Britain

DOCUMENT TYPE: Journal LANGUAGE: English

We have used Heidenhain-pouch dogs to investigate the effects of AB (\pm) -5-methoxy-2-{[(4-methoxy-3,5-dimethylpyrid-2-yl)methyl]sulphinyl}-1H-imidazo[4,5-b]pyridine (TU-199), an imidazopyridine derivative, on gastric acid secretion stimulated by histamine, carbachol and tetragastrin. We have also investigated the duration of the antisecretory effect of TU-199 using a measurement of intragastric pH for 24 h in gastric fistula dogs whose gastric acid secretion was stimulated by histamine. Single oral administration of TU-199 (0.1, 0.2 and 0.4 mg kg-1) dose-dependently suppressed gastric acid secretion stimulated by histamine infusion. Oral treatment with TU-199 (0.2, 0.4 and 0.8 mg kg-1) also dose-dependently inhibited acid secretion induced by carbachol and tetragastrin. The inhibitory effect of TU-199 on stimulated gastric acid secretion was more potent than that of omeprazole, a well-known H+,K+-ATPase inhibitor in dogs. Repeated oral treatment with TU-199 at a dose of 0.2 mg kg-1 once a day for seven days markedly suppressed histamine-stimulated gastric acid secretion in dogs. This inhibitory effect of TU-199 reached a maximum level after three or four doses and was more pronounced than that of omeprazole or lansoprazole. In gastric fistula dogs, the duration of intragastric pH-elevation by administration of TU-199 (0.3 mg kg-1) was much longer than that of omeprazole (0.6 mg kg-1) or lansoprazole (0.9 mg kg-1). The IC50 values (doses resulting in 50% inhibition) of TU-199, omeprazole and lansoprazole with regard to H+,K+-ATPase activity in dog gastric mucosal microsomes were 8.6, 8.8 and 9.9 μM , resp. These results indicate that TU-199 inhibits gastric acid secretion via suppression of a H+,K+-ATPase activity. Our findings also suggest that TU-199 might have potent and long-lasting effects on gastric acid secretion.

IT 113712-98-4, TU-199

RN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(ATPase inhibitor TU-199 long-lasting effect on gastric acid secretion) 113712-98-4 CAPLUS

L3 ANSWER 125 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:319622 CAPLUS

DOCUMENT NUMBER: 131:139269

TITLE: Effects of TU-199, a novel H+, K+-ATPase inhibitor, on

gastric acid secretion and gastroduodenal ulcers in

rats

AUTHOR(S): Uchiyama, Kazuyuki; Wakatsuki, Daisuke; Kakinoki,

Bunpei; Takeuchi, Yoshishige; Araki, Tsutomu;

Morinaka, Yasuhiro

CORPORATE SOURCE: Medicinal Research Group II, Kazusa Research

Laboratories, Tokyo Tanabe Co. Ltd., Chiba, Japan Methods and Findings in Experimental and Clinical

Methods and Findings in Experimental and Clinical

Pharmacology (1999), 21(2), 115-122

CODEN: MFEPDX; ISSN: 0379-0355

PUBLISHER: Prous Science

DOCUMENT TYPE: Journal LANGUAGE: English

SOURCE:

We studied the effects of TU-199, a novel H+, K+-ATPase inhibitor, on AB gastric acid secretion and gastroduodenal lesions in rats in comparison with those of omeprazole, TU-199 inhibited hog gastric H+,K+-ATPase activity and its potency was almost equal to that of omeprazole (IC50 =6.2 and 4.2 μM , resp.). In vivo, TU-199 inhibited basal gastric acid secretion in pylorus-ligated rats in a dose-dependent manner (ED50 = 4.2 mg/kg p.o.). In gastric fistula rats, TU-199 (2.5 and 5 mg/kg i.d.) also inhibited gastric acid secretion stimulated by histamine, carbachol or tetragastrin. Furthermore, TU-199 prevented the formation of water-immersion restraint stress-, pylorus ligation- and indomethacin-induced gastric lesions, and mepirizole-induced duodenal ulcer in rats. These antisecretory and antiulcer effects of TU-199 were 2-4 times more potent than those of omeprazole. The results demonstrate that TU-199 potently inhibits the acid secretion and formation of ulcers in various exptl. rat models via an inhibition of H+, K+-ATPase. These findings suggest that TU-199 may have a beneficial effect against peptic ulcer disease in humans.

IT 113712-98-4, TU-199

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(effects of TU-199, a novel H+, K+-ATPase inhibitor, on gastric acid secretion and gastroduodenal ulcers in rats)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline Me & OMe \\ \end{array}$$

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 126 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:87682 CAPLUS

DOCUMENT NUMBER: 130:320329

TITLE: Pharmacokinetic studies of TU-199. (III). Metabolism

in rats and dogs

AUTHOR(S): Kurosawa, Satoshi

CORPORATE SOURCE: Tokai Res. Laboratories, Daiichi Pure Chemicals Co.,

Ltd., Japan

SOURCE: Yakuri to Chiryo (1998), 26(12), 2017-2032

CODEN: YACHDS; ISSN: 0386-3603

PUBLISHER: Raifu Saiensu Shuppan K.K.

DOCUMENT TYPE: Journal LANGUAGE: Japanese

AB The pharmacokinetics of TU-199 were studied in rats and dogs following oral and i.v. administration. The results are discussed with regard to the metabolic pass way of TU-199.

IT 113712-98-4, TU-199

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(pharmacokinetic studies of TU-199. (III). metabolism in rats and dogs)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

IT 113713-24-9 223713-77-7 223713-78-8

223713-79-9 223713-80-2 223713-84-6

223713-85-7 223713-86-8

RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)

(pharmacokinetic studies of TU-199. (III). metabolism in rats and dogs)

RN 113713-24-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (CA INDEX NAME)

RN 223713-77-7 CAPLUS

RN 223713-78-8 CAPLUS

CN 3-Pyridinecarboxylic acid, 4-methoxy-6-[[(5-methoxy-1H-imidazo[4,5-b]pyridin-2-yl)sulfinyl]methyl]-5-methyl- (9CI) (CA INDEX NAME)

RN 223713-79-9 CAPLUS

CN 3-Pyridinecarboxylic acid, 4-methoxy-6-[[(5-methoxy-1H-imidazo[4,5-b]pyridin-2-yl)thio]methyl]-5-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \text{N} & \text{N} \\ \hline & \text{N} & \text{N} \\ \hline & \text{N} & \text{H} \\ \end{array}$$

RN 223713-80-2 CAPLUS

CN 3-Pyridinecarboxylic acid, 4-methoxy-6-[[(5-methoxy-1H-imidazo[4,5-b]pyridin-2-yl)sulfonyl]methyl]-5-methyl- (9CI) (CA INDEX NAME)

RN 223713-84-6 CAPLUS

CN 3-Pyridinemethanol, 4-methoxy-6-[[(5-methoxy-1H-imidazo[4,5-b]pyridin-2-yl)thio]methyl]-5-methyl- (9CI) (CA INDEX NAME)

RN 223713-85-7 CAPLUS

CN 3-Pyridinemethanol, 4-methoxy-6-[[(5-methoxy-1H-imidazo[4,5-b]pyridin-2-yl)sulfinyl]methyl]-5-methyl- (9CI) (CA INDEX NAME)

RN 223713-86-8 CAPLUS

CN 3-Pyridinemethanol, 4-methoxy-6-[[(5-methoxy-1H-imidazo[4,5-b]pyridin-2-yl)sulfonyl]methyl]-5-methyl- (9CI) (CA INDEX NAME)

L3 ANSWER 127 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:87680 CAPLUS

DOCUMENT NUMBER: 130:305983

TITLE: Pharmacokinetic studies of TU-199. (II). Absorption,

distribution and excretion after multiple

administration to rats and transfer into fetus and

milk

AUTHOR(S): Esumi, Yoshio

CORPORATE SOURCE: Tokai Res. Laboratories, Daiichi Pure Chemicals Co.,

Ltd., Japan

SOURCE: Yakuri to Chiryo (1998), 26(12), 2007-2016

CODEN: YACHDS; ISSN: 0386-3603

PUBLISHER: Raifu Saiensu Shuppan K.K.

DOCUMENT TYPE: Journal LANGUAGE: Japanese

AB The pharmacokinetics of TU-199 were studied in male and pregnant female

rats following repeated and single administration, resp., using

14C-TU-199. The results are discussed with regard to tissue distribution and excretion and transfer into the fetus and milk during pregnancy.

IT 113712-98-4, TU-199

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(pharmacokinetic studies of TU-199. (II). Absorption, distribution and excretion after multiple administration to rats and transfer into fetus and milk)

RN 113712-98-4 CAPLUS

L3 ANSWER 128 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:87677 CAPLUS

DOCUMENT NUMBER: 130:305982

TITLE: Pharmacokinetic studies of TU-199. (I). Absorption,

distribution and excretion after single administration

to rats and dogs

AUTHOR(S): Esumi, Yoshio

CORPORATE SOURCE: Tokai Res. Laboratories, Daiichi Pure Chemicals Co.,

Ltd., Japan

SOURCE: Yakuri to Chiryo (1998), 26(12), 1993-2005

CODEN: YACHDS; ISSN: 0386-3603

PUBLISHER: Raifu Saiensu Shuppan K.K.

DOCUMENT TYPE: Journal LANGUAGE: Japanese

AB The pharmacokinetics of TU-199 e.g. absorption, distribution and excretion were studied in rats and dogs following oral or i.v. administration of

14C-TU-199.

IT 113712-98-4, TU-199

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)

(pharmacokinetic studies of TU-199. (I). Absorption, distribution and

excretion after single administration to rats and dogs)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & N \\ \end{array}$$
 S- CH₂
$$\begin{array}{c|c} N \\ Me \\ \end{array}$$
 Me
$$\begin{array}{c|c} O \\ Me \\ \end{array}$$
 OMe

L3 ANSWER 129 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:87668 CAPLUS

DOCUMENT NUMBER: 130:306367

TITLE: Mutagenicity study on TU-199

AUTHOR(S): Daigo, Hideo; Baba, Katsuyuki; Morotome, Kazuo

CORPORATE SOURCE: Safety Evaluation Group Kazusa Res. Laboratories R & D

Div., Tokyo Co., Ltd., Kisarazu shi, Chiba, 292-0812,

Japan

SOURCE: Yakuri to Chiryo (1998), 26(12), 1979-1992

CODEN: YACHDS; ISSN: 0386-3603

PUBLISHER: Raifu Saiensu Shuppan K.K.

DOCUMENT TYPE: Journal LANGUAGE: Japanese

A reverse mutation study using bacteria, a chromosomal aberration study using CHKL/IU cell and micronucleus test on TU-199, an anti-ulcer drug under development were conducted in mice. A reverse mutation study was performed using 5 bacterial strains (Salmonella typhimurium TA98, TA100, TA1535, TA1537 and Escherichia coli WP2 uvrA) by the direct method and the metabolic activation method by including a pre-incubation process. TU-199 did not increase the number of revertant colonies of any strain compared to the neg. controls in either the direct method or the metabolic activation method, indicating that it has no potential to induce reverse mutation. chromosomal aberration study was performed using a Chinese hamster lung fibroblast cell line (CHL/IU) by the direct method and the metabolic activation method. After treatment with TU-199, the incidence of cells with structurally aberrant chromosomes was less than 5% in both the direct metabolic activation methods, indicating that TU-199 does not induce chromosomal aberration. A micronucleus test was performed by oral administration in 8-wk-old male ICR mice. No significant increase was observed in the incidence of micronuclei in polychromatic or normochromatic erythrocytes after administration of TU-199, indicating that TU-199 does not induce micronuclei under the conditions of the present study. Thus, from the results of these three test, we concluded that TU-199 does not cause mutation.

IT 113712-98-4, TU-199

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(mutagenicity study on TU-199)

RN 113712-98-4 CAPLUS

L3 ANSWER 130 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:87615 CAPLUS

DOCUMENT NUMBER: 130:306366

TITLE: Teratological study by oral administration of TU-199

in rabbits

AUTHOR(S): Umemura, Tatsuo; Ishikura, Toshikazu; Morohashi,

Tetsuo; Tamaki, Yasushi; Morolome, Kazuo

CORPORATE SOURCE: Kannami Lab. Bozo Res. Center Inc., Kannami-cho,

Tagata-gun, Shizuoka, 419-0101, Japan

SOURCE: Yakuri to Chiryo (1998), 26(12), 1969-1978

CODEN: YACHDS; ISSN: 0386-3603

PUBLISHER: Raifu Saiensu Shuppan K.K.

DOCUMENT TYPE: Journal LANGUAGE: Japanese

A study was conducted in which TU-199 was administered orally to New Zealand White (Kbl:NZW) SPF rabbits, at dose levels of 2, 10, 5 and 250mg/kg, once daily for a period of 13 days from day 6 to day 18 of gestation, which corresponds to the period of fetal organogenesis, and the effects on dams and their fetuses were examined 1) Dams: In the dams, no effects from administration of the test article were observed in the 10 mg/kg and below groups. In the 50 and 250 mg/kg groups, a decrease in or depressed body weight gains were seen during the administration period and food consumption was also low. In the 250 mg/kg group, there was a decrease in the amount of feces and the excretion of reddish brown urine was noted in many animals. There were also some animals which aborted. In addition, in the same group, stomach wts. showed significantly high values. However, in the macropathol. findings and findings at Cesarean section, no effects from administration of the test article were observed 2) Fetuses: For the fetuses, no effects from administration of the test article were seen on survival and growth in any of the treatment groups and no teratogenic effects were observed Based on the above results and under the conditions of this study, the no-effect dose level for TU-199 was determined to be 10 mg/kg for general toxicol. effects on dams, 50 mg/kg for reproduction, and 250 mg/kg for effects on fetuses, and at 250 mg/kg it was judged to have no teratogenic effects.

IT 113712-98-4, TU-199

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(teratol. study by oral administration of TU-199 in rabbits)

RN 113712-98-4 CAPLUS

L3 ANSWER 131 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:87587 CAPLUS

DOCUMENT NUMBER: 130:306365

TITLE: Teratological study by oral administration of TU 199

in rats

AUTHOR(S): Ishida, Shigeru; Fujioka, Minoru; Morohashi, Tetsuo;

Tamaki, Yasushi; Morotome, Kazuo

CORPORATE SOURCE: Gotemba Lab. Bozo Res. Center Inc., Gotemba City

Shizuoka, 412-0039, Japan

SOURCE: Yakuri to Chiryo (1998), 26(12), 1951-1968

CODEN: YACHDS; ISSN: 0386-3603

PUBLISHER: Raifu Saiensu Shuppan K.K.

DOCUMENT TYPE: Journal LANGUAGE: Japanese

A teratol. study was conducted in which TU-199 was administered orally by gavage to Crj:CD (SD) SPF rats, at dose levels of 4, 20, 100 and 500 mg/kg, for an 11-day period from day 7-17 of gestation, and the effects on dams, fetuses and newborn pups were examined 1) Dams: In the general condition, reddish brown urine, thought to be discoloration caused by metabolites, was observed in the 500 mg/kg group. In the body weight and food consumption, mildly depressed body weight gains and a decrease in food consumption were seen in the 500~mg/kg group during the administration period. In the macropathol. findings and absolute organ wts. at Cesarean section and weaning, no effects from administration of the test article were observed 2) Dams reproductive performance: There were no premature or aborted birth in any of the test groups and no effects from administration of the test article were observed in the Cesarean section data or parturition and lactation condition. 3) Fetuses: There was no decrease in the implantation index and no increase in the ratio of dead/resorbed fetuses in any of the test groups. In addition, there were no significant differences in the body weight of the live fetuses in each test group and no effects from administration of the test article were observed in the external, visceral and skeletal examns. 4) Newborn pups: No effects from administration of the test article were seen in any of the test groups in the external observation, body weight, viability, external differentiation, visceral examination of stillborn pups and pups that died, macropathol. findings at each stage, functional, behavioral and reproductive performance tests. Based on the above results and under the conditions of this study, it was determined that the general toxicol. no-effect dose level for dams was 100 mg/kg and the no-effect dose level for dams reproductive performance and for fetuses and newborn pups was 500 mg/kg.

IT 113712-98-4, TU 199

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(teratol. study by oral administration of TU 199 in rats)

RN 113712-98-4 CAPLUS

L3 ANSWER 132 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:87538 CAPLUS

DOCUMENT NUMBER: 130:306364

AUTHOR(S):

TITLE: Thirteen-week oral toxicity study followed by

five-week recovery study of TU-199 in beagle dogs Okamoto, Masami; Takahashi, Eiji; Akai, Hiroyuki; Tamura, Kazutoshi; Tagishi, Soichiro; Morohashi,

Tetuo; Morotome, Kazuo

CORPORATE SOURCE: Kannami Lab. Bozo Res. Center Inc., Kannami-cho,

Tagata-qun, Shizuoka, 419-0101, Japan

SOURCE: Yakuri to Chiryo (1998), 26(12), 1923-1949

CODEN: YACHDS; ISSN: 0386-3603

PUBLISHER: Raifu Saiensu Shuppan K.K.

DOCUMENT TYPE: Journal LANGUAGE: Japanese

A repeat administration toxicity study was conducted in which TU-199 was administered orally by gavage, at dose levels of 0.5, 5, 50 and 500 mg/kg to groups of 6 male and 6 female beagle dogs, daily for 13 wk. For 2 males and 2 females in each group, the drug was withdrawn for 5 wk and the reversibility examined There were no deaths in males or females in the control group nor in any of the treatment groups. In the general condition, a high frequency of vomiting was seen in males and females in the 500 mg/kg group in week 1 or administration, and stool mixed with the test article was seen during the administration period in males and females in the 50 mg/kg and above groups. In the blood chemical, a high value for urea nitrogen was seen in males in the 500 mg/kg group. In the measurement of serum gastrin concentration, high values were seen in males and females in the 5 mg/kg and above groups. In the pathol. examination, changes in the stomach were seen in males and females in the 5 mg/kg and above groups and a change in the thyroid in males and females in the 500 mg/kg group. In the stomach, dilation and hypertrophy of the mucous membrane in the body of the stomach were seen macroscopically, and histol., hypertrophy together with edema and fibrosis of the mucous membrane in the corpus ventriculi, and increase in parietal cells, vacuolation of the parietal cells, dilation of the fundic glands and partial epithelial necrosis in the fundic glands were seen. In the thyroid, hypertrophy of the follicular epithelial cells was seen. No changes thought to be effects from administration of the test article were seen in the body weight, food consumption, urinalysis, hematol., ophthalmol. or electrocardiograms. In the recovery study with withdrawal of the drug for 5 wk, changes were seen only in the stomach and the other changes seen during the administration period were not observed. The changes in the stomach were, dilation and hypertrophy of the mucous membrane in the body of the stomach seen macroscopically in the 5 mg/kg and above groups, but histol., only a slight increase in parietal cells was seen in the 50 and 500 mg/kg groups, and the change was considered to be reversible. Based on the above results, the no-effect dose level of TU-199 in a 13 wk repeat administration toxicity study by oral administration in beagle dogs was judged to be 0.5 mg/kg day.

113712-98-4, TU-199

ΙT

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(thirteen-week oral toxicity study followed by five-week recovery study of TU-199 in beagle dogs)

RN 113712-98-4 CAPLUS

L3 ANSWER 133 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:87487 CAPLUS

DOCUMENT NUMBER: 130:306363

TITLE: Thirteen-week oral toxicity study followed by

five-week recovery study of TU-199 in rats

AUTHOR(S): Morohashi, Tetsuo; Tagishi, Soichiro; Sakurada,

Hiroshi; Sebata, Noriyuki; Morotome, Kazuo

Div., Tokyo Tanabe Co., Ltd., Kisarazu-shi, Chiba,

Safety Evaluation Group Kazusa Res. Laboratories R & D

292-0812, Japan

SOURCE: Yakuri to Chiryo (1998), 26(12), 1897-1922

CODEN: YACHDS; ISSN: 0386-3603

PUBLISHER: Raifu Saiensu Shuppan K.K.

DOCUMENT TYPE: Journal LANGUAGE: Japanese

CORPORATE SOURCE:

A short-term oral toxicity study of TU-199, which is expected to be useful as an anti-peptic ulcer drug, was conducted using rats as a part of its safety evaluation program. TU-199 was orally administered at 10, 30, 100 and 500 mg/kg for 13 wk. Reversibility was evaluated after a 5-wk drug-free rest period. No animal died during the study period and no change attributable to the test material was observed in body weight or food consumption. In the observation of general symptoms and urinalysis, males given 100 mg/kg or greater doses and females given 500 mg/kg showed red-brown urine, which was thought to reflect the color of metabolites. Changes attributable to the test material were observed mainly in the stomach, liver and thyroid. Regarding the stomach, males and females from all treated groups showed increases in weight and eosinophilia of secretory granules associated with hypertrophy of chief cells, changes which were thought to be due to pharmacol. activity of the drug. Males given 100 mg/kg or greater doses and females given 110 mg/kg or greater doses sporadically showed slight single-cell necrosis in the chief cell region. Males given 30 mg/kg or greater doses and females given 100 mg/kg or greater doses showed increases in liver weight and changes such as decreases in transaminase levels and increases in total cholesterol levels. Males and females given 500 mg/kg showed decreases in thyroid colloid. Males given 500 mg/kg also showed decreases in T3 levels and slight anemia. These changes were reversed or showed a tendency to reversal during a 5-wk drug-free rest period, indicating that they are reversible. In conclusion, the toxicol. no-observed effect level in males and females were thought to be 30 mg/kg and 10 mg/kg or below because single-cell necrosis were not observed in the chief cell region.

IT 113712-98-4, TU-199

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(thirteen-week oral toxicity study followed by five-week recovery study of TU-199 in rats)

RN 113712-98-4 CAPLUS

L3 ANSWER 134 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:171958 CAPLUS

DOCUMENT NUMBER: 124:212082

TITLE: Multiple unit pharmaceutical preparations containing

proton pump inhibitor

INVENTOR(S): Bergstrand, Pontus John Arvid; Loevgren, Kurt Ingmar

PATENT ASSIGNEE(S): Astra Aktiebolag, Swed. SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PATENT NO.				KINI)	DATE			APP:	LICAT	ION	NO.		D.	DATE 19950607 E, ES, FI, J, LV, MD, E, SK, TJ, R, IE, IT, MR, NE, 19950607		
WO		624			A1		1996	0125		WO	1995-	SE67	8		1	9950		
	W:																	
				MW,	MX,	NO,	NΖ,	PL,	PT,	RO	, RU,	SD,	SE,	SG,	SI,	SK,	ТJ,	
		TM,																
	RW:																	
					PT,	SE,	BF,	ВJ,	CF,	CG	, CI,	CM,	GΑ,	GN,	ML,	MR,	ΝE,	
		SN,	TD,	ΤG														
CA	2170	644			A1		1996 1996 1996	0125		CA	1995- 1995-	2170	644		1			
CA	2170	995			A1		1996	0126		CA	1995-	2170	995		1	9950	607	
AU	9529	938			A		1996	0209		AU	1995–	2993	8		1	9950	607	
AU	6959	71			В2		1998	0827										
EΡ	7234	37			A1		1996	0731		EP	1995-	9260	55		1	9950	607	
EP	7234				В1		2004											
			BE,	CH,														SE
CN	1134	667			А		1996	1030		CN	1995-	1908	16		1	9950	607	
CN	1134	668			А		1996	1030		CN	1995–	1908	19		1	9950	607	
JР	0950	2740			Τ		1997	0318		JP	1996-	5042	49		1	9950	607	
JΡ	3878	669			В2		2007	0207										
HU	7593	4			A2		1997	0528		HU	1996-	574			1	9950	607	
BR	9506	028			А		1997	1014		BR	1995–	6028			1	9950	607	
EE	3292				В1		2000	1016		EE	1996-	32			1	9950	607	
PL	1805	98 935 41			В1		2001	0330		PL	1995–	3133	88		1	9950	607	
RU	2166	935			C2		2001	0520		RU	1996-	1070	40		1	9950	607	
		41			В6		2004	0302		SK	1996-	300			1	9950	607	
	1452									EP .	2004-	1114	7		1	9950	607	
EP	1452						2004											
	R:					DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	ΝL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV													
ΑT	2753	96			T _		2004	0915		ΑT	1995-	9260	55		1	9950	607	
CZ	2943	80			В6		2004	1215		CZ	1996-	730			1	9950	607	
PΤ	7234	37 556 99			Т		2004	1231		PT	1995-	9260	55		1	9950	607	
ES	2227	556			Т3		2005 2001	0401		ES	1995-	9260	55		1	9950	607	
TW	4215	99			В		2001	0211		TW	1995-	8410	6116		1	9950	615	
							2005			IN	1995-	DE11	21		1	9950	616	
		DE01	122		A		2005	0311										
	5753				A		1998	0519		US	1995-	4647	74		1	9950	622	
	9505				A		1998 1996 1996	0108		ZA	1995-	5546			1	9950	704	
	9505						1996	0108										
	1144				A		2002				1995-					9950		
	9601				A		1996				1996-					9960		
	9601				A		1996				1996-					9960		
	9600				A		1996			NO	1996-	948			1	9960	307	
	3168				B1		2004				1000	1000	0.6		_	0000	010	
	1008				A1		2005	0218			1998-					9980		
RITY	Z APP	LN.	INFO	.:						SE	1994-	2431		,	A 1	9940	708	

EP 1995-926055

A3 19950607 W 19950607

WO 1995-SE678

OTHER SOURCE(S):

MARPAT 124:212082

AB A new pharmaceutical multiple unit tabletted dosage form containing an acid labile H+K+-ATPase inhibitor or an alkaline salt thereof or one of its single enantiomers or an alkaline salt thereof is claimed. Tablet core containing lansoprazole 400, sugar sphere seeds 400, HPMC 82, Na lauryl sulfate 3, and water 1600 were coated with a separating layer in a fluid bed apparatus containing

talc and Mg stearate and HPMC. An enteric coating solution cong. methacrylic acid copolymer and polysorbate and glycerides was sprayed onto the pellets covered with separating layer in a fluid bed apparatus Enteric coating layer pellets 82 and microcryst. cellulose 191 g were mixed and compressed into tablets.

IT 113712-98-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (multiple unit pharmaceutical prepns. containing proton pump inhibitor)

RN 113712-98-4 CAPLUS

$$\begin{array}{c|c} H & O \\ N & N \\ \end{array}$$
 S = CH₂ N Me Me OMe

L3 ANSWER 135 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:753867 CAPLUS

DOCUMENT NUMBER: 123:179490

TITLE: Stabilized preparations containing antiulcer agents

and inorganic salts

INVENTOR(S): Matsushita, Tomohisa; Hashimoto, Akio

PATENT ASSIGNEE(S): Tokyo Tanabe Co, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE		
				_			
JP 07157430	A	19950620	JP 1994-242687		19941006		
PRIORITY APPLN. INFO.:			JP 1994-242687	Α	19941006		
			JP 1993-254048		19931012		

AB Stable prepns. contain acid-labile antiulcer 2-[[(2-pyridyl)methyl]sulfinyl]imidazo[4,5-b]pyridines and basic inorg. salts as stabilizers. TU-199 (1 g) was mixed with 1 g Al(OH)3 gel and left at 40° and 75% relative humidity for 2 wk to show no discoloration.

IT 113712-98-4, TU 199

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (stabilization of antiulcer imidazopyridines by inorg. basic salts)

RN 113712-98-4 CAPLUS

L3 ANSWER 136 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:677361 CAPLUS

DOCUMENT NUMBER: 123:65832

TITLE: Tablet containing enteric granules INVENTOR(S): Matsushita, Tomohisa; Hashimoto, Mitsuo

PATENT ASSIGNEE(S): Tokyo Tanabe Co. Ltd., Japan

SOURCE: PCT Int. Appl., 13 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.			KIND DATE			APPLICATION NO.						D.	DATE			
WO	9510264 W: AU			A1 KR,		1995	0420		WO	1994-	JP16	75		1	9941	006	
	RW: AT	BE,	CH,	DE,	DK.	ES,	FR,	GB,	GR	, IE,	ΙΤ,	LU,	MC,	NL,	PT,	SE	
CA	2173506			A1		1995	0420		CA	1994-	2173	506		1	9941	006	
CA	2173506			С		2006	0509										
AU	9478222			Α		1995	0504		AU	1994-	7822	2		1	9941	006	
AU	683092			В2		1997	1030										
EP	723777			A1		1996	0731		EΡ	1994-	9290	12		1	9941	006	
EP	723777			В1		2002	0703										
	R: AT,	,	CH,		DK.	•		,		, ,	•						SE
AT	219931			T		2002	0715		ΑT	1994-	9290	12		1	9941	006	
PT	723777			${f T}$		2002	1129		PT	1994-	9290	12		1	9941	006	
ES	2179079			Т3		2003	0116		ES	1994-	9290	12		1	9941	006	
JP	3710473			В2		2005	1026		JΡ	1995-	5115	80		1	9941	006	
US	5798120			Α		1998	0825		US	1996-	6245	10		1	9960	405	
PRIORIT	Y APPLN.	INFO	.:						JΡ	1993-	2540	49		A 1	9931	012	
									WO	1994-	JP16	75		W 1	9941	006	

AB A tablet comprises enteric granules prepared by tableting a mixture of enteric granules containing a basis with at least one member selected from the group consisting of synthetic hydrotalcite, dried aluminum hydroxide gel, a coppt. of aluminum hydroxide with sodium hydrogencarbonate, aluminum magnesium hydroxide, synthetic aluminum silicate and dihydroxyaluminum aminoacetate. As compared with the conventional tablets containing coated granules, this tablet has the following advantages: the content of enteric granules is increased by using a specified filler; the basis is rapidly dispersed in the granules; the granules have drug-release ability and acid resistance comparable tablet has a high strength. The technique of preparing a tablet having a high enteric granule content has merits of an improved administrability due to a reduced size of the tablet and the applicability to other drugs.

IT 113712-98-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Tablet containing enteric granules comprising hydrotalcite or other substances)

RN 113712-98-4 CAPLUS

L3 ANSWER 137 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:164168 CAPLUS

DOCUMENT NUMBER: 120:164168

TITLE: Preparation of 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-

pyridyl)methyl]thio]imidazo[4,5-b]pyridine and its

intermediates

INVENTOR(S): Amano, Michiaki; Takeda, Haruki

PATENT ASSIGNEE(S): Tokyo Tanabe Co, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	API	PLICATION NO.	DATE
JP 05222038	A	19930831	JP	1992-25002	19920212
JP 3158599	В2	20010423			
RIORITY APPLN. INFO.:			JΡ	1992-25002	19920212
THER SOURCE(S):	CASREA	CT 120:16416	8		

OT. GI

PR

AB The title compound (I; R = MeO, n = 0) (II), useful as an intermediate for a known antiulcer agent, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridyl)methyl]sulfinyl]imidazo[4,5-b]pyridine, is prepared Thus, 4-chloro-2-chloromethyl-3,5-dimethylpyridine N-oxide was stirred with 2-mercapto-5-methoxyimidazo[4,5-b]pyridine in EtOH at 35° for 2.5 h to give 82% I (R = Cl, n = 1) which was refluxed with NaOMe in MeOH-PhMe for 4 h to give 71% I (R = MeO, n = 1). This was stirred with PCl3 in CH2Cl2 at room temperature for 3 h to give 95% II.

IT 113712-98-4

RL: RCT (Reactant); RACT (Reactant or reagent)
 (intermediate for, methoxy[(methoxydimethylpyridyl)methyl]thio]imidazop
 yridine as)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

Ι

IT 153476-64-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation and reduction of)

RN 153476-64-3 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-1-oxido-2-pyridinyl)methyl]thio]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & N \\ \end{array}$$
 Me
$$\begin{array}{c|c} O & N \\ N & Me \\ \end{array}$$
 Me
$$\begin{array}{c|c} O & Me \\ \end{array}$$

IT 113713-24-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as antiulcer agent, intermediates and process for)

RN 113713-24-9 CAPLUS

L3 ANSWER 138 OF 138 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:150480 CAPLUS

DOCUMENT NUMBER: 108:150480

ORIGINAL REFERENCE NO.: 108:24716h,24717a

TITLE: Preparation, testing, and formulation of

pyridylmethylsulfinylimidazopyridines as ulcer

inhibitors

INVENTOR(S): Matsuishi, Naoto; Takeda, Haruki; Iizumi, Kenichi;

Murakami, Kiyokazu; Hisamitsu, Akira

PATENT ASSIGNEE(S): Tokyo Tanabe Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 28 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.			KIND DATE			APPLICATION NO.					DATE		
EP	2545	 88			A1	_	1988	0127	EP	1987-	 -306570			19870724
EP	2545	88			В1		1992	0115						
	R:	AT,	BE,	CH,	DE,	ES,	FR,	GB,	GR, I	Γ, LI,	LU, NL,	SE		
JP	6314	6882			A		1988	0618	JP	1987-	-133534			19870530
JP	0604	3426			В		1994	0608						
AU	8775	628			A		1988	0128	AU	1987-	-75628			19870714
AU	5985	64			В2		1990	0628						
ZA	8705	151			A		1988	0330	ZA	1987-	-5151			19870714
CA	1329	204			С		1994	0503	CA	1987-	-542637			19870721
HU	4600	0			A2		1988	0928	HU	1987-	-3407			19870724
US	4808	596			А		1989	0228	US	1987-	-77686			19870724
AT	7162	6			T		1992	0215	AT	1987-	-306570			19870724
ES	2038	184			Т3		1993	0716	ES	1987-	-306570			19870724
PRIORIT	Y APP	LN.	INFO	. :					JP	1986-	-173551	P	¥	19860725
									JP	1987-	-133534	P	¥	19870530
									EP	1987-	-306570	P	7	19870724

OTHER SOURCE(S): CASREACT 108:150480; MARPAT 108:150480

GΙ

$$\begin{array}{c|c} & R3 & R2 \\ & & \\ R1 & & \\ N & & N \end{array}$$

AB The title compds. [I; R1 = (cycloalkyl)alkoxy, fluoroalkoxy; R2 = H, Me, MeO; R3,R4 = H, Me] were prepared as ulcer inhibitors. 2-Mercapto-5-methoxyimidazo[4,5-b]pyridino-2-chloromethyl-3,5-dimethylpyridine.HCl, and KOH were refluxed 2 h in EtOH to give 2-[2-(3,5-dimethyl)pyridylmethylthio]-5-methoxyimidazo[4,5-b]pyridine. No procedure was given for oxidation of the latter to the corresponding I. I inhibited gastric acid secretion in rats with ED50's of 9-73 mg/kg orally.

IT 113713-24-9 113713-26-1

RL: RCT (Reactant); RACT (Reactant or reagent) (oxidation of, in preparation of ulcer inhibitor)

RN 113713-24-9 CAPLUS

RN 113713-26-1 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-5-methyl-2-pyridinyl)methyl]thio]- (9CI) (CA INDEX NAME)

IT 113712-98-4P 113713-00-1P 113713-61-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as ulcer inhibitor)

RN 113712-98-4 CAPLUS

CN 3H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (CA INDEX NAME)

RN 113713-00-1 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 5-methoxy-2-[[(4-methoxy-5-methyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline \\ MeO & N \\ \end{array}$$
 Me OMe

RN 113713-61-4 CAPLUS

CN 1H-Imidazo[4,5-b]pyridine, 2-[[(4,5-dimethoxy-2-pyridinyl)methyl]sulfinyl]-5-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline \\ N & OMe \\ \end{array}$$

=> d his

(FILE 'HOME' ENTERED AT 14:05:40 ON 01 APR 2008)

FILE 'REGISTRY' ENTERED AT 14:05:52 ON 01 APR 2008

L1 STRUCTURE UPLOADED

L2 54 S L1 FULL

FILE 'CAPLUS' ENTERED AT 14:06:23 ON 01 APR 2008

L3 138 S L2 FULL

=> log y

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
TOTAL
933.55

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -110.40 -110.40

STN INTERNATIONAL LOGOFF AT 14:10:07 ON 01 APR 2008